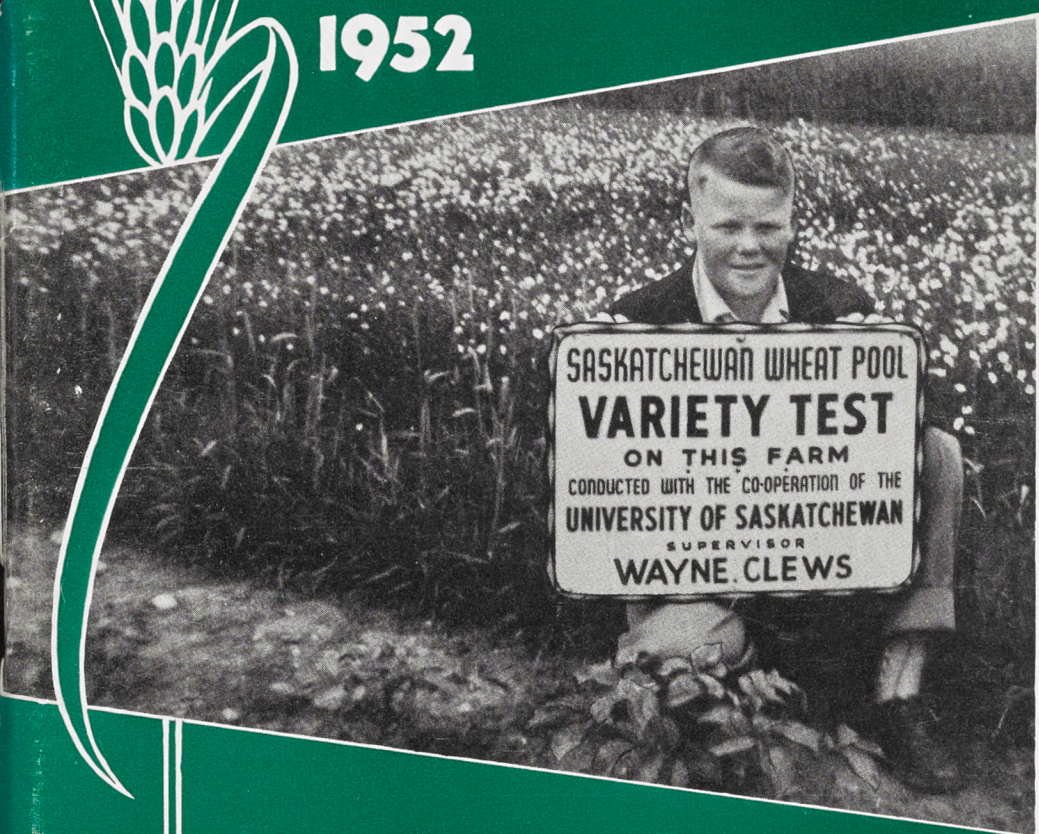


# **JUNIOR CO-OPERATIVE VARIETY TESTS**

**1952**



*Published by*

**SASKATCHEWAN CO-OPERATIVE PRODUCERS LIMITED**

**HEAD OFFICE: REGINA**





JUNIOR CO-OPERATIVE

# Variety Tests

WHEAT, BARLEY and FLAX

1952



PUBLISHED BY  
SASKATCHEWAN CO-OPERATIVE PRODUCERS LIMITED  
MARCH, 1953

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# Foreword



by the PRESIDENT of SASKATCHEWAN  
CO-OPERATIVE PRODUCERS LIMITED

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*Last year Saskatchewan farmers harvested the largest crop of cereal grains in the history of the province. This outstanding achievement was mainly the result of adequate moisture reserves, ideal growing conditions, and good farm practices—although there were other factors as well which contributed to the volume of the 1952 crop.*

*One of the most important of these is the use of improved grain varieties. Through the years scientists have given constant attention to breeding varieties with characteristics which will withstand the ravages of plant diseases, insect pests, and the harsh climate of the prairie region. Much has been accomplished in this field during the past half-century, and thousands of new varieties have been introduced.*

*Because this type of research is of major significance for Saskatchewan farm people, the Wheat Pool annually conducts field tests with some of the newly-developed varieties on farms in all parts of the province. A great deal of valuable information has been obtained from these tests in the past, and I am sure that the results of the 1952 projects, contained in this booklet, will be of interest.*

*In most cases these tests are seeded and cared for by sons or daughters of Wheat Pool members. The keen interest and ability displayed by these young people is a source of pride to our organization. It gives me great pleasure, therefore, to thank our Junior Co-operators for the contribution they are making to the agricultural welfare of Saskatchewan.*

J. H. WESSON.

# Introduction

IT IS NOW more than 18 years since the Saskatchewan Wheat Pool established its first annual project of scientifically-planned province-wide field tests with new varieties of grain. During the years these projects have provided accurate and timely information regarding the suitability of many new varieties for use in Saskatchewan.

During the 1952 season, 320 tests were conducted with varieties of wheat, barley and flax. The tests were supervised by young farm men and women who were carefully selected for the work by the Wheat Pool delegates in their sub-districts. Some of the young people were experienced test supervisors and others were conducting a project for the first time.

Assistance in setting up the program and conducting the work was given by the Field Husbandry Department of the University of Saskatchewan.

The following table shows the type of tests conducted and the number of each:

Project	No. of Individual Tests	Varieties Used
Wheat.....	167	Thatcher, W-555, Stewart, Nugget, Chinook and Lee. (1)
Barley.....	111	Vantage, N x 1-11, Harlan, Titan, Montcalm and B-130. (2)
Flax.....	42	Royal, Marine, Redwing, Redwood and Rocket.

(1) Only five of the six wheat varieties listed were used in each test. Chinook, a sawfly-resistant variety, was used in tests throughout the south, central and western Cereal Variety Zones (1A to 2F) but was replaced by Lee in the eastern and northern zones (3A to 4B) of the province.

(2) Vantage and N x 1-11 were used in all tests. Titan and Harlan were included only in the south, central and western zones. They were replaced by Montcalm and B-130 (malt-tasting varieties) in the eastern and northern zones. (See Zone Map, page 39.)

The wheat, barley and flax projects were summarized for comparison on a yield per acre basis and several other important characteristics such as weight per measured bushel, height, straw strength, and days required to mature were also recorded. The results are given in detail for each individual test. However, a single test is not a satisfactory guide in the choice of a variety because of the variations in soil and climatic conditions which occur within a general area. For this reason, the average results are summarized for all tests conducted within each cereal variety zone, and this discussion provides a more adequate basis for comparing the different varieties.

The section of the booklet dealing exclusively with wheat tests begins on page 10.

The section of the booklet dealing exclusively with barley tests begins on page 42.

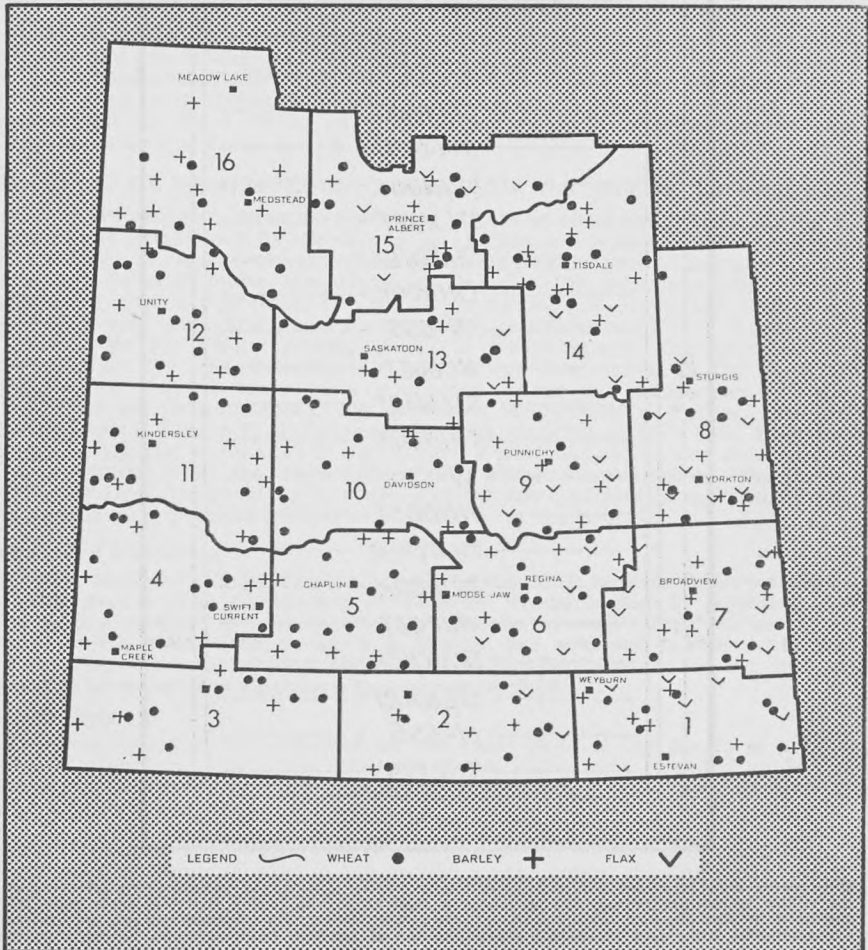
The section of the booklet dealing with flax tests begins on page 62. Flax tests were not conducted throughout the entire province but were limited to Cereal Variety Zones 2A, 2E, 3A, 3B, 3C, 3F and 4A.

## DESCRIPTION OF TESTS

A diagram of the wheat test appears on page 6. Twenty rows were sown, allowing for four replicates of each variety. The rows were 16½ feet in length and were placed 18 inches apart. For protection purposes an extra buffer row was placed at each end of the test and the entire project was surrounded by a winter wheat border.

The barley tests and the flax tests were seeded in a similar manner. The barley test consisted of twenty plots of two rows each, allowing for five replicates of each of the four varieties. The flax test consisted of the same number of two-row plots, but there were five varieties and these were replicated four times throughout the test. One of the rows in each plot was used for testing purposes and the other provided protection and segregation for the test row. For additional protection the entire test was surrounded by a winter wheat border.

MAP SHOWING LOCATION OF TESTS ACCORDING TO WHEAT POOL DISTRICTS



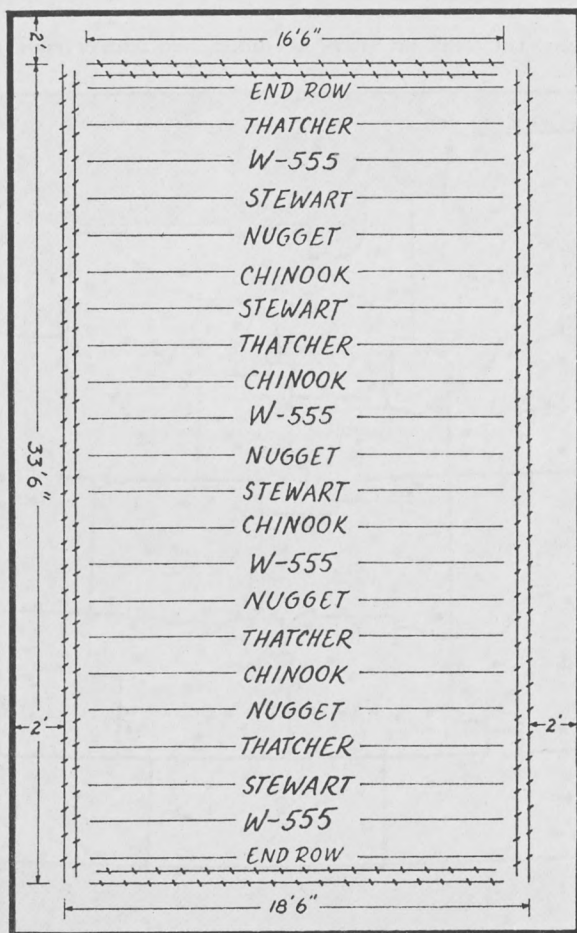


## ORGANIZATION OF THE TESTING PROGRAM

In order to determine the suitability of a variety for use in different parts of the province it is necessary to conduct tests under many different types of soil and climate. An attempt was made in 1952, therefore, to place two tests in each of the 166 Wheat Pool sub-districts of Saskatchewan. With few exceptions the desired distribution was achieved. This is illustrated in the map on page 5, which shows the location of each test.

As the success of the project was dependent upon the accuracy with which each test was carried out, it was necessary to choose as test supervisors a group of dependable young farm people who had a keen interest in this type of work. Selection of the supervisors in each sub-district was carried out by the Wheat Pool delegate for the area. The supervisors chosen were, in most cases, between the ages of sixteen and twenty-one years.

PLAN OF WHEAT TEST



The crossed lines represent border rows of winter wheat. A two-foot pathway was left between the winter wheat border and the surrounding field crop. The barley and flax tests were laid out in a similar manner, except that 41 rows were sown. Five randomizations, or varietal arrangements, were used in seeding the tests. One of the five randomizations is shown in the above plan.

The equipment required for each test was supplied from Head Office of the Wheat Pool in Regina. Individual parcels of seed were carefully prepared and were shipped to the supervisors, together with full instructions explaining in detail the method of seeding the test. During the growing season, close contact was maintained between each of the 320 Junior Co-operators and the Junior Co-operative Department of the Wheat Pool organization.

The supervisors were requested to complete and forward regular progress reports concerning the comparative development of each variety. The information from these reports was summarized and was used as the basis for the results which appear in this booklet. When the grain was ripe, each co-operator carried out harvesting operations according to special instructions which had been supplied to him. Care was taken to ensure that the returns for each row were parcelled separately and were carefully marked in order to prevent errors in identification. The sheaves were dried and turned over to the nearest Pool Elevator agent for shipment to Head Office. On arrival at Regina, the sheaves were threshed separately and the yields were recorded. A sample of each variety was cleaned, weighed in pounds per measured bushel and graded.

Finally the yield, bushel weight and grade of each variety were entered on a summary sheet together with the detailed information which the supervisor had supplied in his reports during the growing season.

As has been the case during the past seventeen years, the project was planned and supervised under the guidance of Dr. J. B. Harrington, Professor of Field Husbandry, University of Saskatchewan, Saskatoon. The threshing, summarizing and statistical analysis in connection with the project were carried out at Head Office of the Saskatchewan Wheat Pool under the direction and supervision of I. K. Mumford.

## **FACTS TO BE REMEMBERED IN READING AND STUDYING RESULTS**

The information compiled from the results of tests carried out during a single year should not be considered as conclusive evidence in the selection of a variety. A variety which gives a favorable performance in any one season may not do well under conditions which exist the following year. When making a choice, therefore, the farmer is advised to study the results of several years' tests and in this regard the pamphlet entitled "Varieties of Grain Crops for Saskatchewan, 1953," is recommended. This pamphlet is compiled by the Saskatchewan Cereal Variety Committee on the basis of information derived from tests conducted under the supervision of the University of Saskatchewan, the Dominion Experimental Farms, and the Saskatchewan Wheat Pool. Copies have been supplied to each Pool Elevator agent for the use of farmers in his district. Additional copies may be obtained free of charge from the University of Saskatchewan, Saskatoon; the Saskatchewan Department of Agriculture, Regina; the Saskatchewan Wheat Pool, Regina; or any Dominion Experimental Farm in the province.

### **Necessary Difference**

The statistical term, "Necessary Difference," is used in different parts of this report. The "Necessary Difference" is calculated by applying an approved statistical formula to the yield results of each individual test. The result of the calculation is shown in bushels per acre and it represents the amount by which a variety must outyield another variety in the test in order to be considered significantly superior in yield.

### **Straw Strength**

Straw strength was reported on the basis 10-0. If the plants in a plot were straight and erect, the strength of the straw was recorded as 10. If the straw showed signs of weakness a lower figure was used, depending upon the degree of weakness observed.

### **Neck Strength**

This term appears only in the section of the report dealing with barley tests. Neck strength was recorded on the basis of 1, 2, 3, where 1 indicated a strong neck holding the head upright, 2 indicated a neck of medium strength, while 3 was used when the neck appeared weak.

### Results of Individual Tests

The results of individual tests appear in the following tables: Wheat, No. 25; Barley, No. 47; Flax, No. 57. These results are arranged according to Wheat Pool districts (illustrated on page 5), so that a reader who wishes to study the results in a particular area may readily locate the tests in which he is interested. It should be emphasized that the results of a single test give an accurate comparison of the varieties only under the conditions which exist on the farm where the test is located. An examination of the results in these tables will reveal the fact that the varieties do not show similar relationships in all areas of the province. Results may differ widely, even in tests grown relatively close together. This variation may be due to several causes, most important of which are differences in soil type, climatic conditions, and date of seeding.

### Grading Remarks

In determining commercial grades, bushel weight is a very important factor. However, there are many other factors which may lower the grade of a sample.

In the individual results, the column headed "Grading Remarks" contains abbreviations which are used to denote any adverse characteristics other than bushel weight, which appear in the sample of grain.

The following abbreviations have been used to indicate the various defects:

**Bl.**—Bleached  
**S.B.P.**—Some Black Point  
**B.P.**—Black Point  
**D.**—Dark  
**E.**—Ergoty  
**S.E.**—Some Ergoty

**F.**—Frosted  
**S.G.**—Some Green Kernels  
**G.**—Green  
**V.G.**—Very Green  
**I.**—Immature  
**M.**—Mildewed

**Pk.**—Pink  
**Spr.**—Sprouted  
**St.**—Stained  
**S. Stch.**—Some Starchy Kernels  
**Stch.**—Starchy  
**W.**—Weathered



Fred and Arlene Sutter of Shaunavon inspecting their wheat test.

### ANALYSIS OF DATA

The individual tests were grouped for analysis on the basis of cereal variety zones. These zones, the boundaries of which were laid out by the Saskatchewan Cereal Variety Committee, are described below and illustrated on pages 38 and 39. Each zone represents an area within which the soil is of the same general type, and where climatic conditions are normally some-



what similar. It should be stressed, however, that local conditions within a zone sometimes vary considerably from the average of the zone.

### Cereal Variety Zones—Prevailing Soil Type and Climatic Conditions

- 1A Brown soils; subject to frequent droughts.
- 1B Brown soils; subject to more frequent droughts than 1A.
- 1C Brown soils; chiefly burn-out types; subject to more frequent droughts than 1A.
- 2A Dark brown soils; subject to occasional droughts; better moisture conditions than 1A.
- 2B Dark brown soils; slightly cooler than 2A.
- 2C Dark brown soils; bench land; cooler, shorter frost-free season and better moisture conditions than 1A.
- 2D Dark brown soils; higher elevation and distinctly shorter frost-free season than 2B.
- 2E Dark brown heavy clay soils; more drought resistance than 2A and 2B.
- 2F Brown and dark brown heavy clay soils; more drought resistance than 1A and adjoining 2B.
- 3A Black soils; better moisture conditions than 2A.
- 3B Deep black and degraded black soils; shorter frost-free period and better moisture conditions than 3A.
- 3C Black soils; better moisture conditions than 2B, and cooler than 3A and 3G.
- 3D Deep black soils; better moisture conditions than 3E.
- 3E Black soils; shorter frost-free season and better moisture conditions than 2D.
- 3F Degraded black and some grey soils; shorter frost-free period than 3D.
- 3G Black soils; medium to light textured, more droughty than 3E.
- 3H Degraded black soils; distinctly short frost-free season.
- 4A Grey and strongly degraded black soils; short frost-free season.
- 4B Grey soils; distinctly short frost-free season; better moisture conditions than 3E.

**Note.**—The above descriptions are based on information contained in the "Guide to Farm Practice in Saskatchewan, 1951."



Thomas Runcie of Pambrun and his wheat variety test.

### RAINFALL

As the amount of rainfall during the growing season has a greater influence upon the yields than the amount of annual precipitation, the rainfall shown in the following table covers only the months representing the growing period of wheat in Saskatchewan.

**TABLE No. 1.—AVERAGE MONTHLY PRECIPITATION IN INCHES DURING THE PERIOD MAY-AUGUST SUMMARIZED BY CEREAL VARIETY ZONES**

Cereal Variety Zone	May	June	July	August	Total
1A.....	1.29	2.87	2.46	1.87	8.49
1B.....	1.78	2.59	1.42	1.46	7.25
1C and 2C.....	1.17	2.75	2.47	3.17	9.56
2A.....	.78	3.99	2.40	2.30	9.47
2B.....	1.03	2.74	1.48	1.27	6.52
2D.....	1.49	3.62	2.48	.97	8.56
2E.....	.74	3.87	2.48	2.60	9.69
2F.....	1.39	2.95	2.08	.80	7.22
3A.....	.60	3.95	2.28	4.00	10.83
3B.....	1.24	2.43	2.23	2.59	8.49
3C.....	.63	2.48	2.13	2.83	8.07
3D.....	2.25	1.88	2.88	2.04	9.05
3E.....	1.32	3.77	3.48	1.19	9.76
3F.....	2.24	2.70	3.66	1.66	10.26
3G.....	1.49	3.76	2.92	.88	9.05
4A.....	1.49	2.11	2.29	1.75	7.64
4B.....	1.44	3.93	3.73	1.65	10.75

**Note.**—The above table was compiled from monthly rainfall records kept by test supervisors. Each supervisor was supplied with a rain gauge and one of his duties was to keep a monthly precipitation record.

## WHEAT TESTS

The wheat project consisted of 167 field tests and these were distributed throughout the entire grain growing area of the province. Six varieties were tested. Thatcher, W-555, Nugget and Stewart were grown in all zones. Chinook was included in the tests in the open prairie region (Cereal Variety Zones 1A and 2F)\*, where its sawfly-resistant characteristics are of importance. It was replaced by Lee in the black and grey soils of the park belt and wooded area (Cereal Variety Zones 3A and 4B).\*

### DESCRIPTION OF VARIETIES

**NOTE**—For a report on official recommendations, and yielding ability of the following varieties see "Summarization According to Cereal Variety Zones."

**Thatcher** was produced from a cross made in 1921 at the Minnesota Agricultural Experiment Station, St. Paul, between (Marquis X Iumillo) X (Marquis X Kanred). From one of the original crosses (Marquis X Iumillo), a bread wheat type was obtained with a considerable degree of resistance to stem rust under field conditions. From the Marquis X Kanred cross, a spring wheat was selected of good milling and baking quality that was immune to several forms of stem rust and had high yielding ability. Thatcher originated from a cross between these two. Thatcher is highly resistant to shattering and spring frost damage. It is resistant to stem rust (except race 15B), and to loose smut, but is susceptible to leaf rust and covered smut. Thatcher is moderately resistant to common rootrot.

**Chinook** is a new sawfly-resistant red spring wheat variety developed at the Swift Current Experimental station from the cross Thatcher X S-615. Compared with the Rescue variety, which it was bred to replace, Chinook is taller, earlier, has higher bushel weight and is superior in quality. It is resistant to stem rust (except race 15B), is moderately susceptible to common rootrot, and is susceptible to covered smut, loose smut and leaf rust. Chinook is susceptible to spring frost damage. It was licensed in 1952.

**Lee** is a new bearded, bread wheat variety developed at the University of Minnesota from the cross Hope X Timstein. It is resistant to stem rust (except race 15B) and to leaf rust, moderately resistant to common rootrot, but is susceptible to covered and loose smuts. Compared with Thatcher, Lee has shorter slightly weaker straw, equal bushel weight and resistance to shattering, and is slightly later in maturity. It is moderately susceptible to spring frost damage. It has been licensed in Canada.

**W-555** is a code name adopted by the Wheat Pool for a new unlicensed variety developed at the Laboratory of Cereal Breeding, Winnipeg, from the cross R.L. 2265 X Redman, backcrossed twice on to Redman. It is a hard red spring variety with resistance to most races of stem and leaf rust. It is medium-early in maturity. Another strain with improvements in certain characteristics has recently been developed by selection from W-555. It is therefore unlikely that W-555 will be licensed.

**Stewart** is a relatively new, high-quality durum variety developed at the North Dakota Agricultural College as the result of backcrossing Mindum X Vernal with Mindum. It is resistant to stem rust (except race 15B) and leaf rust, but is susceptible to covered smut and moderately susceptible to common rootrot. Stewart is moderately resistant to sawflies and has moderately strong straw. It is considered equal in quality to Mindum and is eligible for grade 1 C.W. Amber Durum. Stewart has been licensed in Canada.

**Nugget** is a new amber durum variety developed at the North Dakota Experiment station, in co-operation with the United States Department of Agriculture, from the double cross (Mindum X Carleton) X (Heiti X Stewart). It is resistant to stem rust (except race 15B), leaf rust, and rootrot, and is moderately susceptible to loose and covered smuts. Compared with Stewart, it is shorter and weaker in straw, and earlier in maturity. It is a high-quality variety and is eligible for grade 1 C.W. Amber Durum. Nugget has been licensed in Canada.

\*See Cereal Variety Zone map, page 39.

**TABLE No. 2.—AVERAGE YIELDS IN BUSHELS PER ACRE  
SUMMARIZED BY CEREAL VARIETY ZONES**

Cereal Variety Zone	No. of Satisfactory Tests	Thatcher	Chinook	Lee	W-555	Nugget	Stewart	Necessary Difference* in Bushels
1A.....	26	28.6	23.9	—	28.7	29.2	33.2	2.1
1B.....	8	29.0	24.8	—	26.5	24.6	28.7	2.3
1C.....	2	31.6	25.4	—	27.3	27.2	24.2	3.9
2A.....	8	21.3	20.0	—	25.5	24.7	27.4	4.1
2B.....	15	30.0	24.9	—	27.4	26.7	29.1	2.7
2D.....	4	28.2	23.4	—	28.9	21.6	24.4	5.3
2E.....	4	31.5	28.0	—	32.2	40.1	47.9	3.3
3A.....	4	24.5	—	25.5	28.9	22.9	24.4	2.8
3B.....	9	38.6	—	33.9	35.2	33.6	35.1	3.9
3C.....	16	29.1	—	24.6	27.9	24.8	27.9	1.9
3D.....	4	40.9	—	34.6	37.8	32.7	36.5	3.9
3E.....	7	37.8	—	36.8	41.1	35.2	41.8	3.0
3F.....	5	43.4	—	35.4	41.4	36.7	42.6	5.2
3G.....	4	26.4	—	26.5	29.5	21.7	24.8	4.0
4A.....	4	44.9	—	36.5	40.1	37.3	38.2	3.1
4B.....	3	30.1	—	25.9	30.5	19.2	18.3	N.S.

\***Necessary Difference.**—Since yielding ability of varieties cannot be measured with absolute accuracy, small differences have no significance. Unless the difference in yield of two varieties is greater than the necessary difference as shown in the tables, little confidence can be placed in the superiority of one variety over the other in that particular zone group.

N.S.—No significant grain yield difference between varieties.

**Note.**—There were no satisfactory tests in zone 2C; only one test was conducted in Zone 2F.

Table No. 2. Zones 1A to 2F. Summarizing the yield results of the bread wheat varieties, **Thatcher** outyielded **W-555** significantly in three of the seven zones. **W-555** outyielded **Thatcher** in three zones, but only in Zone 2A was the yield difference of a significant nature. In Zone 1A **Thatcher** and **W-555** were practically equal in yield. Both varieties outyielded **Chinook** in every zone. Of the two durum varieties, **Stewart** outyielded **Nugget** in every zone except 1C. Comparing the bread wheat varieties with the durums **Stewart** outyielded all other varieties in Zones 1A, 2A and 2E. In the four remaining zones one or more of the bread wheats outyielded **Stewart** in each case. The durums gave their best performance in Zone 2E where both **Stewart** and **Nugget** outyielded the bread wheat varieties significantly. In Zone 2D, however, the durums were significantly outyielded by both **Thatcher** and **W-555**.

Zones 3A to 4B. An average of the bread wheat yields throughout this area shows that **Thatcher** outyielded **W-555** by a narrow margin, with **Lee** in third place. On a zone basis, **Thatcher** was high yielder in five zones, exceeding **W-555** significantly in 3B, 3F and 4A. **W-555** outyielded the two other bread wheats in four zones, its yield advantage over **Thatcher** being significant in 3A and 3E. **Lee** was outyielded by **W-555** in all zones, and by **Thatcher** in all zones except 3A and 3G. In 3G **Thatcher** and **Lee** were practically equal and in 3A **Lee** outyielded the standard variety. Of the durum varieties, **Stewart** was generally higher yielding than **Nugget**. Both durum varieties yielded less in most of these zones than the bread wheats. **Thatcher** outyielded **Stewart** in every zone except 3E.

**TABLE No. 3.—AVERAGE NUMBER OF DAYS FROM SEEDING TO RIPENING  
SUMMARIZED BY CEREAL VARIETY ZONES**

Cereal Variety Zone	Thatcher	Chinook	Lee	W-555	Nugget	Stewart
1A.....	113.3	113.7	—	113.4	116.2	118.0
1B.....	102.0	103.0	—	102.0	103.0	117.0
2A.....	105.3	109.0	—	106.3	106.3	107.3
2B.....	100.9	101.7	—	100.9	103.3	105.0
2D.....	106.0	106.0	—	106.0	105.0	106.0
2E.....	121.5	122.0	—	122.0	123.0	123.5
3A.....	109.0	—	112.8	109.5	108.3	110.8
3B.....	114.2	—	114.2	112.5	114.2	118.0
3C.....	112.0	—	115.0	111.7	118.5	120.8
3D.....	115.0	—	116.0	114.0	125.0	125.0
3E.....	119.6	—	120.8	119.4	120.8	121.2
3F.....	109.0	—	110.0	109.3	113.3	113.7
3G.....	—	—	—	—	—	—
4A.....	106.0	—	111.0	106.5	112.5	112.5
4B.....	110.0	—	110.0	107.0	114.0	116.0

Table No. 3. Zones 1A to 2E. **Thatcher** ripened earlier than the other varieties. **W-555** was second in maturity on an average basis, with **Chinook** third, **Nugget** fourth and **Stewart** fifth.



Zones 3A to 4B. **W-555** ripened earlier than the other varieties in most zones of this group. On an average basis **Thatcher** placed second, **Lee** third, **Nugget** fourth and **Stewart** fifth.

TABLE No. 4.—AVERAGE HEIGHT OF PLANTS IN INCHES  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Thatcher	Chinook	Lee	W-555	Nugget	Stewart
1A.....	33.1	35.0	—	33.5	34.4	42.0
1B.....	33.0	34.3	—	37.3	33.7	37.3
2A.....	34.0	35.0	—	34.5	36.0	44.0
2B.....	33.1	33.3	—	33.4	33.4	38.0
2D.....	30.7	32.0	—	29.7	28.7	32.0
2E.....	39.5	39.0	—	38.0	39.5	46.0
3A.....	35.5	—	35.3	36.2	36.5	46.2
3B.....	33.0	—	32.5	32.5	35.8	45.2
3C.....	31.4	—	30.6	30.7	32.2	41.1
3D.....	32.5	—	32.5	33.5	39.5	45.5
3E.....	38.3	—	37.7	37.8	39.8	47.5
3F.....	38.6	—	38.0	38.4	42.0	49.4
3G.....	38.0	—	38.0	37.0	39.0	42.0
4A.....	38.5	—	36.5	39.5	39.5	47.5
4B.....	38.5	—	37.5	36.5	38.5	47.0

Table No. 4. Zones 1A to 2E. **Stewart** exceeded the other varieties in height in most zones. Only minor differences in height were noted among the other varieties.

Zones 3A to 4B. **Stewart** was somewhat taller than the other varieties in every zone. Generally, **Nugget** placed second. On an average basis **Thatcher** placed third, followed closely by **W-555** and **Lee**.

TABLE No. 5.—AVERAGE STRAW STRENGTH OF PLANTS  
ON THE BASIS 10 (STRONG) — 0 (WEAK)  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Thatcher	Chinook	Lee	W-555	Nugget	Stewart
1A.....	9.2	8.8	—	9.2	7.9	8.2
1B.....	8.3	8.6	—	7.6	5.9	6.0
2A.....	9.7	9.8	—	10.0	7.7	8.6
2B.....	9.5	9.4	—	8.8	8.4	8.5
2D.....	8.8	8.9	—	9.1	7.0	6.9
2E.....	8.0	8.5	—	8.5	7.9	7.5
3A.....	8.8	—	9.0	9.2	6.8	7.9
3B.....	9.8	—	7.9	9.0	8.2	7.5
3C.....	9.3	—	9.5	9.4	8.0	8.5
3D.....	9.5	—	9.5	9.5	7.0	6.0
3E.....	9.2	—	9.1	9.3	7.5	7.6
3F.....	8.8	—	9.3	9.6	6.7	6.3
3G.....	—	—	—	—	—	—
4A.....	8.9	—	7.3	9.1	5.0	6.0
4B.....	9.8	—	9.5	10.0	8.3	7.4

Table No. 5. Zones 1A to 2E. The bread wheat varieties showed only minor differences in straw strength in this group of zones. The durum varieties were considerably weaker than the bread wheats, with **Stewart** showing slightly more strength than **Nugget**.

Zones 3A to 4B. **W-555** had stronger straw than the other varieties, but again the differences among the bread wheat varieties were of a minor nature. Both durum varieties were comparatively weak.

TABLE No. 6.—AVERAGE WEIGHT PER MEASURED BUSHEL  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Thatcher	Chinook	Lee	W-555	Nugget	Stewart
1A.....	61.4	63.1	—	61.4	62.9	63.3
1B.....	62.6	63.9	—	61.8	64.3	64.5
2A.....	58.1	60.5	—	60.0	60.0	60.6
2B.....	62.8	64.0	—	62.2	63.9	64.2
2D.....	62.3	63.7	—	61.8	62.2	62.3
2E.....	61.0	63.0	—	61.8	63.5	64.3
3A.....	60.1	—	61.7	61.6	60.1	60.4
3B.....	62.6	—	62.1	62.6	62.8	63.2
3C.....	63.0	—	62.1	62.4	63.1	64.1
3D.....	62.8	—	61.5	62.3	62.5	64.3
3E.....	62.7	—	61.4	62.0	62.6	62.1
3F.....	63.3	—	60.8	62.5	63.2	62.0
3G.....	63.0	—	62.4	62.2	62.8	61.8
4A.....	63.6	—	62.2	62.8	63.4	62.8
4B.....	62.3	—	61.7	62.0	61.0	61.3

Table No. 6. Zones 1A to 2E. **Stewart** was superior in bushel weight. **Nugget** and **Chinook** were practically equal on an average basis. **Chinook** was somewhat higher in bushel weight than the other bread wheat varieties.

Zones 3A to 4B. **Thatcher** excelled in bushel weight in several of the northerly zones, and **Stewart** showed superiority in 3B, 3C and 3D. **Lee** outweighed the other varieties in Zone 3A, possibly because of its greater resistance to leaf rust. In most zones, however, **Lee** was outweighed by the other bread wheat varieties. **Nugget** generally placed second but dropped to fifth place in Zones 3A and 4B.

TABLE No. 7.—PERCENTAGE OF COMMERCIAL GRADES BY VARIETIES  
(ZONES 1A TO 2E)

Variety	1 Hd. %	1 N. %	2 N. %	3 N. %	4 N. %	4 Sp. %	No. 5 %	No. 6 %
Thatcher.....	4.2	47.2	22.2	19.4	5.6	1.4	—	—
Chinook.....	4.2	62.5	18.0	11.1	2.8	1.4	—	—
W-555.....	—	50.0	26.4	19.4	2.8	—	1.4	—
Nugget.....		1 C.W.	2 C.W.	3 C.W.	4 C.W.		5 C.W.	6 C.W.
Stewart.....		52.7	23.6	16.7	4.2		2.8	—
		48.6	26.4	18.0	4.2		2.8	—

Table No. 7. All varieties graded well as a result of high bushel weight and good harvesting conditions. **Chinook** produced slightly better grades than the other bread wheat varieties. **W-555** and **Thatcher** were practically equal. **Nugget** graded slightly better than **Stewart** in the durum class.

TABLE No. 8.—PERCENTAGE OF COMMERCIAL GRADES BY VARIETIES  
(ZONES 3A TO 4B)

Variety	1 Hd. %	1 N. %	2 N. %	3 N. %	4 N. %	4 Sp. %	No. 5 %	No. 6 %	Feed %
Thatcher.....	—	29.4	29.4	25.0	8.8	1.5	1.5	4.4	—
Lee.....	—	14.7	27.9	25.0	22.1	—	4.4	5.9	—
W-555.....	—	16.3	36.7	32.3	8.8	—	—	5.9	—
Nugget.....		1 C.W.	2 C.W.	3 C.W.	4 C.W.		5 C.W.	6 C.W.	Feed
Stewart.....		23.5	23.5	30.9	14.7		1.5	4.4	1.5
		26.5	19.2	27.9	17.6		2.9	5.9	—

Table No. 8. **Thatcher** produced the best grades among the bread wheats, followed by **W-555** and **Lee** in that order. The two durum varieties, **Nugget** and **Stewart**, were practically equal in grading ability.

## SUMMARIZATION ACCORDING TO CEREAL VARIETY ZONES

In comparing the performance of the varieties in a particular district, it is advisable to study, not only the results of the individual test in that



George Kuchinka of Macoun and his wheat variety test.

district, but also the average results of all tests conducted under similar conditions of soil and climate. Accordingly, the following section of the booklet has been prepared showing the average results of all tests within each cereal variety zone. The cereal variety zones are illustrated on page 39 and described in the "Analysis of Data," on page 8. Each zone represents an area within which the soil and climate are generally similar, although in some cases local variations occur which may influence the performance of a variety.

Because of different weather conditions which occur from one season to another, the results of several years' tests should be considered in judging the ability of a variety. The discussions of yield performance which follow are based on information obtained from Wheat Pool tests over a period of years.

The "official recommendations" referred to in the following pages are the recommendations of the Saskatchewan Cereal Variety Committee.

TABLE No. 9.—SUMMARIZED RESULTS FOR ZONE 1A  
(26 satisfactory tests)

	Thatcher	Chinook	W-555	Nugget	Stewart
Yield in bushels per acre.....	28.6	23.9	28.7	29.2	33.2
Days from seeding to ripening.....	113.3	113.7	113.4	116.2	118.0
Height of plants in inches.....	33.1	35.0	33.5	34.4	42.0
Straw strength (maximum of 10).....	9.2	8.8	9.2	7.9	8.2
Bushel weight in pounds.....	61.4	63.1	61.4	62.9	63.3
Commercial grades in percentage: 1 Hard.....	3.5	3.5	—	—	—
1 Nor. and 1 C.W.....	44.8	65.5	51.7	51.7	48.3
2 Nor. and 2 C.W.....	27.6	13.8	27.6	27.6	27.6
3 Nor. and 3 C.W.....	17.2	13.8	13.8	10.3	20.7
4 Nor. and 4 C.W.....	6.9	3.4	3.5	10.4	—
No. 5 and 5 C.W.....	—	—	3.4	—	3.4

Necessary difference—2.1 bushels.

### Yield Performance During Recent Years—Zone 1A

**Stewart** outyielded all other varieties significantly in 1952. Stewart has been tested four times since 1947, and in three of the four years it outyielded all other varieties in Zone 1A. In the one remaining year, 1949, Stewart was outyielded significantly by the other varieties in the tests. Drought and grasshoppers caused severe damage to Stewart in that year. On the basis of its general performance, Stewart is recommended officially as one of the best durum varieties for use in the zone.

**Nugget**, the new high quality durum licensed during the past season, placed second in yield but was not significantly higher yielding than W-555 or Thatcher. It was used in these tests for the first time in 1952, and a decision regarding its suitability will not be made until further tests are carried out.

**W-555** placed third in yield in 1952. It has been tested for only one year.

**Thatcher** has been used as the standard variety in these tests for many years, and its general performance has been excellent. It placed fourth in yield in 1952, although the difference was significant only in the case of Stewart. Thatcher outyielded all other varieties in this zone during 1949, 1950 and 1951, and is highly recommended.

**Chinook**, a new sawfly-resistant variety was tested by the Wheat Pool for the first time in 1952. It was outyielded significantly by the four other varieties included in the tests. Although it yielded less than Thatcher in the 1952 Wheat Pool tests throughout Zone 1A, Chinook has given excellent results in a project conducted over a period of years by the Swift Current Experimental station. In these tests also Chinook was outyielded by Thatcher in 1952, but equalled that variety and exceeded Rescue in average yield during a six-year period. Chinook has been recommended officially by the Saskatchewan Cereal Variety Committee for use in Zone 1A.



**TABLE No. 10—SUMMARIZED RESULTS FOR ZONE 1B**  
(8 satisfactory tests)

	Thatcher	Chinook	W-555	Nugget	Stewart
Yield in bushels per acre.....	29.0	24.8	26.5	24.6	28.7
Days from seeding to ripening.....	102.0	103.0	102.0	103.0	117.0
Height of plants in inches.....	33.0	34.3	37.3	33.7	37.3
Straw strength (maximum of 10).....	8.3	8.6	7.6	5.9	6.0
Bushel weight in pounds.....	62.6	63.9	61.8	64.3	64.5
Commercial grades in percentage:					
1 Hard.....	12.5	12.5	—	—	—
1 Nor. and 1 C.W....	50.0	62.5	75.0	62.5	50.0
2 Nor. and 2 C.W....	25.0	12.5	—	25.0	37.5
3 Nor. and 3 C.W....	12.5	12.5	25.0	12.5	12.5

Necessary difference—2.3 bushels.

### Yield Performance During Recent Years—Zone 1B

**Thatcher** outyielded the other varieties in 1952, exceeding W-555, Chinook and Nugget by differences which are significant. In similar tests during the past five years Thatcher ranked first in yield four times and placed second once. It is highly recommended for use in Zone 1B.

**Stewart** placed second in yield in 1952, outyielding Chinook and Nugget significantly. It was tested previously in this zone in 1947 and 1949 but was outyielded by Thatcher and Rescue both times. It is officially recommended as one of the best durum varieties for Zone 1B.

**W-555** was tested for the first time in 1952. It placed third and failed to outyield any variety by a significant margin.

**Chinook** and **Nugget** placed fourth and fifth respectively in yield during 1952. Neither variety had been used previously in Wheat Pool tests and it will not be possible to assess their usefulness until data for a number of years has been assembled.

**TABLE No. 11.—SUMMARIZED RESULTS FOR ZONE 1C**  
(2 satisfactory tests)

	Thatcher	Chinook	W-555	Nugget	Stewart
Yield in bushels per acre.....	31.6	25.4	27.3	27.2	24.2
Days from seeding to ripening.....	120.0	121.0	119.0	121.0	124.0
Height of plants in inches.....	35.1	35.0	33.4	35.1	45.0
Straw strength (maximum of 10).....	10.0	10.0	8.9	9.3	9.0
Bushel weight in pounds.....	61.5	63.5	61.0	63.0	61.5
Commercial grades in percentage:					
1 Nor. and 1 C.W....	50.0	100.0	50.0	100.0	—
2 Nor. and 2 C.W....	50.0	—	50.0	—	100.0

Necessary difference—3.9 bushels.

### Yield Performance During Recent Years—Zone 1C

It should be pointed out that the results for Zone 1C are based on two tests only, and this number is insufficient to provide adequate coverage of the entire zone.

However, the fact that **Thatcher** outyielded all other varieties significantly in 1952, added to its previous outstanding record, makes this variety an excellent choice. Thatcher has been first or second in yield in this zone annually during the past five years, and is officially recommended.

**W-555** and **Nugget** were practically equal in yield, placing second and third. Neither outyielded any of the remaining varieties significantly. This was the first year W-555 and Nugget were tested.

**Chinook** was used in Wheat Pool tests for the first time in 1952. It placed fourth in yield, the difference being significant only in the case of Thatcher. Although Chinook did not give outstanding yields during the past season, its performance in tests conducted over a period of years by the Swift Current Experimental station indicates that it is an excellent choice for use in Zone 1C. Chinook is a new high quality, sawfly-resistant bread wheat. It is being officially recommended for the first time in 1953.

**Stewart** was outyielded by all other varieties, although only **Thatcher** exceeded it by the difference necessary for significance. **Stewart** is recommended as one of the best durum varieties for use in this zone.

**TABLE No. 12.—SUMMARIZED RESULTS FOR ZONE 2A**  
(8 satisfactory tests)

	Thatcher	Chinook	W-555	Nugget	Stewart
Yield in bushels per acre.....	21.3	20.0	25.5	24.7	27.4
Days from seeding to ripening.....	105.3	109.0	106.3	106.3	107.3
Height of plants in inches.....	34.0	35.0	34.5	36.0	44.0
Straw strength (maximum of 10).....	9.7	9.8	10.0	7.7	8.6
Bushel weight in pounds.....	58.1	60.5	60.0	60.0	60.6
Commercial grades in percentage:					
1 Nor. and 1 C.W....	25.0	50.0	12.5	12.5	12.5
2 Nor. and 2 C.W....	25.0	25.0	62.5	25.0	37.5
3 Nor. and 3 C.W....	25.0	12.5	25.0	50.0	12.5
4 Nor. and 4 C.W....	12.5	—	—	—	25.0
4 Spec.....	12.5	12.5	—	—	—
No. 5 and 5 C.W....	—	—	—	—	12.5
No. 6 and 6 C.W....	—	—	—	12.5	—

Necessary difference—4.1 bushels.

### Yield Performance During Recent Years—Zone 2A

**Stewart** ranked first in yield during 1952, exceeding **Thatcher** and **Chinook** by differences which are significant. **Stewart** has been used in Wheat Pool tests four times since 1947, outyielding all other varieties three times and placing second once. It is officially recommended for use in Zone 2A.

**W-555** placed second in 1952, outyielding **Thatcher** and **Chinook** significantly. It had not been tested previously.



Violet Krayniek of Amsterdam inspecting the wheat variety test which she supervised.

**Nugget** placed third, outyielding **Chinook** significantly. Further testing will be required before recommendations regarding this variety can be made.

**Thatcher**, although outyielded by three varieties in the 1952 tests, has been first or second in yield during each of the previous four years. It is officially recommended for use in this zone.

**Chinook** was outyielded by all other varieties in 1952, the first year it was tested by the Wheat Pool. However, it is resistant to sawflies and is higher in quality than **Rescue**. Because of these important features, **Chinook** should be tested further in Zone 2A.

**TABLE No. 13.—SUMMARIZED RESULTS FOR ZONE 2B**  
(15 satisfactory tests)

	Thatcher	Chinook	W-555	Nugget	Stewart
Yield in bushels per acre.....	30.0	24.9	27.4	26.7	29.1
Days from seeding to ripening.....	100.9	101.7	100.9	103.3	105.0
Height of plants in inches.....	33.1	33.3	33.4	33.4	38.0
Straw strength (maximum of 10).....	9.5	9.4	8.8	8.4	8.5
Bushel weight in pounds.....	62.8	64.0	62.2	63.9	64.2
Commercial grades in percentage:					
1 Hard.....	5.9	5.9	—	—	—
1 Nor. and 1 C.W....	58.8	64.7	52.9	70.6	70.6
2 Nor. and 2 C.W....	17.6	23.5	29.4	23.5	17.6
3 Nor. and 3 C.W....	11.8	—	11.8	—	5.9
4 Nor. and 4 C.W....	5.9	5.9	5.9	5.9	5.9

Necessary difference—2.3 bushels.

### Yield Performance During Recent Years—Zone 2B

**Thatcher** outyielded all other varieties in this zone, the differences being significant except in the case of Stewart. Thatcher consistently has been the top yielder in Wheat Pool tests in Zone 2B, and is officially recommended.

**Stewart** placed second in yield, exceeding Nugget and Chinook by differences which are significant. In tests over a period of years Stewart has been consistently lower in yield than Thatcher in Zone 2B. It is one of the best durum varieties, however, and is recommended for this area.

**W-555** ranked third in 1952, being outyielded significantly by Thatcher. This is the first year it was included in Wheat Pool tests.

**Nugget**, in fourth place, was outyielded significantly by Thatcher and Stewart. It is a new durum variety tested for the first time in 1952. As in most other zones it yielded somewhat less than Stewart, one of the recommended durums. Further tests will be carried out before definite recommendations are made regarding Nugget.

**Chinook** was low in yield in 1952. Its high quality and sawfly resistance may be of value in this zone, but further tests will be required before definite recommendations can be made.

**TABLE No. 14.—SUMMARIZED RESULTS FOR ZONE 2D**  
(4 satisfactory tests)

	Thatcher	Chinook	W-555	Nugget	Stewart
Yield in bushels per acre.....	28.2	23.4	28.9	21.6	24.4
Days from seeding to ripening.....	106.0	106.0	106.0	105.0	106.0
Height of plants in inches.....	30.7	32.0	29.7	28.7	32.0
Straw strength (maximum of 10).....	8.8	8.9	9.1	7.0	6.9
Bushel weight in pounds.....	62.3	63.7	61.8	62.2	62.3
Commercial grades in percentage:					
1 Nor. and 1 C.W....	50.0	50.0	33.3	33.3	16.7
2 Nor. and 2 C.W....	—	33.3	16.7	16.7	33.3
3 Nor. and 3 C.W....	50.0	16.7	50.0	50.0	50.0

Necessary difference—2.7 bushels.

### Yield Performance During Recent Years—Zone 2D

**W-555** was high in yield, exceeding Stewart, Chinook and Nugget by significant differences. It was tested for the first time in 1952.

**Thatcher**, in second place, also outyielded Stewart, Chinook and Nugget significantly. Thatcher has been one of the top yielding varieties in this zone for a number of years, equalling Apex and usually outyielding Rcscue in Wheat Pool tests. It is officially recommended.

**Stewart** placed third in yield. With the exception of one year, it has been consistently outyielded by Thatcher since 1947, and is not recommended for Zone 2D.

Chinook and Nugget placed fourth and fifth respectively in yield during 1952, the first year they were included in Wheat Pool tests. Both varieties will be tested further under Saskatchewan conditions.

TABLE No. 15.—SUMMARIZED RESULTS FOR ZONE 2E  
(4 satisfactory tests)

	Thatcher	Chinook	W-555	Nugget	Stewart
Yield in bushels per acre.....	31.5	28.0	32.2	40.1	47.9
Days from seeding to ripening.....	121.5	122.0	122.0	123.0	123.5
Height of plants in inches.....	39.5	39.0	38.0	39.5	46.0
Straw strength (maximum of 10).....	8.0	8.5	8.5	7.9	7.5
Bushel weight in pounds.....	61.0	63.0	61.8	63.5	64.3
Commercial grades in percentage: 1 Nor. and 1 C.W....	50.0	75.0	75.0	75.0	75.0
2 Nor. and 2 C.W....	25.0	—	—	—	—
3 Nor. and 3 C.W....	25.0	25.0	25.0	25.0	25.0

Necessary difference—5.3 bushels.

### Yield Performance During Recent Years—Zone 2E

Stewart outyielded all other varieties significantly in the 1952 tests. During recent years this variety has been top yielder consistently in Zone 2E and is officially recommended as the best durum variety for the zone.

Nugget placed second to Stewart, outyielding all other varieties significantly in the 1952 tests. This is the only zone of the province in which it outyielded Thatcher significantly. On the basis of its first year of testing it does not appear likely that Nugget will equal Stewart, but this cannot be definitely established until further tests are conducted.

W-555 placed third, but did not outyield any of the other varieties significantly in 1952. This is the first year it has been used in Wheat Pool tests.

Thatcher placed fourth in yield in 1952. Although it has been outyielded over a period of years by the durum varieties, Thatcher has generally exceeded the bread wheats in this zone, and is officially recommended.

Chinook, the sawfly-resistant variety, was tested for the first time in 1952. No official recommendations have been made, but its performance compared with Rescue in future tests will largely determine its usefulness in Zone 2E.

### CEREAL VARIETY ZONE 2F

Only one satisfactory test was conducted in Zone 2F. The results of this project will be found in the table "Individual Summarized Results of All Tests—Wheat" under District 11, sub-district 8, and was conducted by Albert Wiens, Herschel.

TABLE No. 16.—SUMMARIZED RESULTS FOR ZONE 3A  
(9 satisfactory tests)

	Thatcher	Lee	W-555	Nugget	Stewart
Yield in bushels per acre.....	24.5	25.5	28.9	22.9	24.4
Days from seeding to ripening.....	109.0	112.8	109.5	108.3	110.8
Height of plants in inches.....	35.5	35.3	36.2	36.5	46.2
Straw strength (maximum of 10).....	8.8	9.0	9.2	6.8	7.9
Bushel weight in pounds.....	60.1	61.7	61.6	60.1	60.4
Commercial grades in percentage: 1 Nor. and 1 C.W....	22.2	22.2	22.2	22.2	22.2
2 Nor. and 2 C.W....	33.4	33.3	44.5	22.2	—
3 Nor. and 3 C.W....	22.2	44.5	33.3	33.4	55.6
4 Nor. and 4 C.W....	22.2	—	—	11.1	11.1
No. 6 and 6 C.W....	—	—	—	—	11.1
Feed.....	—	—	—	11.1	—

Necessary difference—3.3 bushels.

### Yield Performance During Recent Years—Zone 3A

It is interesting to note that W-555 outyielded all other varieties significantly in Zone 3A, an area where stem rust usually causes more severe damage than in other parts of Saskatchewan. This is the first year that



W-555 was included in Wheat Pool tests, and it should be stressed that results for a single year do not provide an adequate basis for definite conclusions. W-555 has considerably more resistance than the older varieties to some of the new races of stem rust, and this may have been a factor in its excellent performance in this zone.

Lee placed second in yield in 1952. In 1950, the first year it was tested, Lee outyielded all other varieties in the zone, and in 1951 it placed second to Thatcher by a narrow margin. Lee is the only variety in commercial production which has resistance to leaf rust, and this feature is of importance in Zone 3A. As a result of its leaf rust resistance and its good performance in recent tests, Lee was added to the list of recommended varieties in this area for the 1953 season.

Over the past three-year period Thatcher has been outyielded on an average basis by Lee. In earlier years it was usually the highest yielder, and still ranks as one of the best varieties for use in the zone.

Stewart was practically equal to Thatcher in yield during 1952, the first year it was included in Wheat Pool tests. It is officially recommended as the best durum variety for this zone.

Nugget was outyielded by all other varieties in 1952, the first year it was used in Wheat Pool tests.

TABLE No. 17.—SUMMARIZED RESULTS FOR ZONE 3B  
(9 satisfactory tests)

	Thatcher	Lee	W-555	Nugget	Stewart
Yield in bushels per acre.....	38.6	33.9	35.2	33.6	35.1
Days from seeding to ripening.....	114.2	114.2	112.5	114.2	118.0
Height of plants in inches.....	33.0	32.5	32.5	35.8	45.2
Straw strength (maximum of 10).....	9.8	7.9	9.0	8.2	7.5
Bushel weight in pounds.....	62.6	62.1	62.6	62.8	63.2
Commercial grades in percentage: 1 Nor. and 1 C.W....	33.3	25.0	25.0	25.0	25.0
2 Nor. and 2 C.W....	41.7	25.0	41.7	25.0	25.0
3 Nor. and 3 C.W....	16.7	33.4	25.0	41.7	41.7
4 Nor. and 4 C.W....	—	8.3	—	—	—
No. 5 and 5 C.W....	—	—	—	8.3	—
No. 6 and 6 C.W....	8.3	8.3	8.3	—	8.3

Necessary difference—2.8 bushels.

### Yield Performance During Recent Years—Zone 3B

Thatcher outyielded all other varieties significantly in 1952. Over the past five-year period it has given better results than any other variety in this zone. It was top yielder three times, tied with Redman for top place in one year, and ranked third in 1949. Thatcher is highly recommended.

W-555 placed second but did not outyield any variety significantly. It was tested for the first time in 1952.

Stewart ranked third in yield in 1952, the first year it was used in Wheat Pool tests in this area. It is recommended officially as the best durum variety for use in this zone.

Lee was fourth in yield in 1952. It has been tested in this zone during three of the past five years and has been outyielded by Thatcher each time. While Lee is not recommended for use generally in Zone 3B, its leaf rust resistance may be worthy of consideration in choosing a variety in the southern part of the zone adjacent to the Manitoba boundary.

Nugget was outyielded by all other varieties in 1952, the first year it was included in widespread tests. It has the advantage of earlier maturity than Stewart durum, and will be tested further in order to determine its suitability for this zone.



The wheat tests conducted by Kenneth Bews of Eatonla, Glenwood Voechting of Tribune and Wayne Sheldon of Old Wives.

TABLE No. 18.—SUMMARIZED RESULTS FOR ZONE 3C  
(16 satisfactory tests)

	Thatcher	Lee	W-555	Nugget	Stewart
Yield in bushels per acre.....	29.1	24.6	27.9	24.8	27.9
Days from seeding to ripening.....	112.0	115.0	111.7	118.5	120.8
Height of plants in inches.....	31.4	30.6	30.7	32.2	41.1
Straw strength (maximum of 10).....	9.3	9.5	9.4	8.0	8.5
Bushel weight in pounds.....	63.0	62.1	62.4	63.1	64.1
Commercial grades in percentage:					
1 Nor. and 1 C.W....	47.1	11.8	17.6	35.3	47.1
2 Nor. and 2 C.W....	29.4	35.3	41.2	29.4	23.5
3 Nor. and 3 C.W....	17.6	17.6	29.4	23.5	11.8
4 Nor. and 4 C.W....	5.9	35.3	11.8	11.8	17.6

Necessary difference—1.9 bushels.

#### Yield Performance During Recent Years—Zone 3C

**Thatcher** was high in yield in 1952, exceeding **Nugget** and **Lee** by differences which are significant. During three of the past five years it has outyielded all other varieties in Wheat Pool tests in Zone 3C. In one of the remaining years, 1950, it practically equalled **Redman** which was the highest yielding variety, and in 1949 it placed third. It has given an excellent performance consistently since it was introduced nearly 15 years ago, and is the only variety recommended officially for this zone.

**W-555** and **Stewart** were equal in yield, and both exceeded **Nugget** and **Lee** by a significant difference. **Stewart** is officially recommended as the best durum variety for use in this zone. **W-555** is still in the early testing stage.

**Nugget** was fourth in yield during 1952, the first year it was included in Wheat Pool tests.

**Lee** was outyielded by all other varieties in 1952. In two previous years of testing **Lee** was outyielded by **Thatcher** but the difference was not significant. While it is not officially recommended **Lee** has given relatively good results in tests in the southern part of the zone, and may be worthy of consideration in districts where leaf rust is a factor.

TABLE No. 19.—SUMMARIZED RESULTS FOR ZONE 3D  
(4 satisfactory tests)

	Thatcher	Lee	W-555	Nugget	Stewart
Yield in bushels per acre.....	40.9	34.6	37.8	32.7	36.5
Days from seeding to ripening.....	115.0	116.0	114.0	125.0	125.0
Height of plants in inches.....	32.5	32.5	33.5	39.5	45.5
Straw strength (maximum of 10).....	9.5	9.5	9.5	7.0	6.0
Bushel weight in pounds.....	62.8	61.5	62.3	62.5	64.3
Commercial grades in percentage:					
1 Nor. and 1 C.W....	25.0	—	—	25.0	50.0
2 Nor. and 2 C.W....	25.0	25.0	50.0	25.0	25.0
3 Nor. and 3 C.W....	50.0	75.0	50.0	50.0	25.0

Necessary difference—3.9 bushels.

### Yield Performance During Recent Years—Zone 3D

**Thatcher** was high in yield in 1952 exceeding all varieties except W-555 by differences which are significant. Thatcher has been the top yielder in this zone for many years, and is the only variety officially recommended.

**W-555** placed second in yield during 1952, the first year it was included in Wheat Pool tests.

**Stewart** was third in yield in 1952. Durum varieties are not recommended for this part of the province, but were included in the 1952 tests in order to provide information regarding the performance of the new Nugget variety in all districts.

**Lee** placed fourth in yield in 1952. It has been outyielded consistently by Thatcher in Wheat Pool tests in this zone, and is not recommended.

**Nugget** was outyielded by all other varieties during 1952, the first year it was tested.

**TABLE No. 20.—SUMMARIZED RESULTS FOR ZONE 3E**  
(7 satisfactory tests)

	Thatcher	Lee	W-555	Nugget	Stewart
Yield in bushels per acre.....	37.8	36.8	41.1	35.2	41.8
Days from seeding to ripening.....	119.6	120.8	119.4	120.8	121.2
Height of plants in inches.....	38.3	37.7	37.8	39.8	47.5
Straw strength (maximum of 10).....	9.2	9.1	9.3	7.5	7.6
Bushel weight in pounds.....	62.7	61.4	62.0	62.6	62.1
Commercial grades in percentage:	14.3	14.3	14.3	14.3	14.3
1 Nor. and 1 C.W....	—	—	—	—	14.3
2 Nor. and 2 C.W....	—	—	—	—	14.3
3 Nor. and 3 C.W....	42.9	28.6	42.9	42.9	28.6
4 Nor. and 4 C.W....	28.6	28.6	28.6	28.6	28.6
No. 5 and 5 C.W....	—	14.3	—	—	—
No. 6 and 6 C.W....	14.2	14.2	14.2	14.2	14.2

Necessary difference—3.0 bushels.

### Yield Performance During Recent Years—Zone 3E

**Stewart** outyielded all other varieties, and the differences were significant except in the case of W-555. It has not been used in Wheat Pool tests previously in this zone, but the weak straw and generally late maturity of Stewart are unfavorable characteristics. Because of these characteristics, durum varieties are not generally considered suitable for use in this northerly area.

**W-555** placed second in yield, exceeding Thatcher, Lee and Nugget significantly. It was tested for the first time in 1952.

**Thatcher** was third in yield in 1952. In previous years Thatcher has always been first or second in yield in this zone, generally exceeding Apex and Redman by a narrow margin. It is officially recommended, along with Redman.

**Lee** was fourth in yield in 1952. It has been tested for three years in this zone, and its average yield has been considerably below that of Thatcher.

**Nugget** was outyielded by all other varieties in 1952, the first year it was included in Wheat Pool tests.

**TABLE No. 21.—SUMMARIZED RESULTS FOR ZONE 3F**  
(5 satisfactory tests)

	Thatcher	Lee	W-555	Nugget	Stewart
Yield in bushels per acre.....	43.4	35.4	37.4	36.7	42.6
Days from seeding to ripening.....	109.0	110.0	109.3	113.3	113.7
Height of plants in inches.....	38.6	38.0	38.4	42.0	49.4
Straw strength (maximum of 10).....	8.8	9.3	9.6	6.7	6.3
Bushel weight in pounds.....	63.3	60.8	62.5	63.2	62.0
Commercial grades in percentage:	16.7	—	—	16.7	—
2 Nor. and 2 C.W....	—	—	—	—	—
3 Nor. and 3 C.W....	66.7	16.7	83.3	50.0	50.0
4 Nor. and 4 C.W....	16.6	66.7	16.7	33.3	33.3
No. 5 and 5 C.W....	—	16.6	—	—	16.7

Necessary difference—5.2 bushels.

### Yield Performance During Recent Years—Zone 3F

**Thatcher** outyielded the four other varieties in 1952, exceeding all except **Stewart** significantly. It has been the top yielder in Zone 3F during each of the past five years, and is the only variety officially recommended.

**Stewart** placed second in yield, exceeding W-555, Nugget and Lee by differences which are significant. Durum varieties are not recommended for Zone 3F, mainly because of their late maturity and relatively weak straw.

**W-555** placed third in yield, but failed to outyield any other variety significantly. This is the first year that W-555 has been used in Wheat Pool tests, and as yet there is not sufficient data to determine its suitability for use in Saskatchewan.

**Nugget** was fourth in yield in 1952. This is the first year that Nugget has been tested extensively in the province, and further tests must be conducted before definite recommendations are made.

**Lee** was outyielded by all other varieties in 1952. It has been tested by the Wheat Pool for three years in this zone, and generally has given a poor performance.

TABLE No. 22.—SUMMARIZED RESULTS FOR ZONE 3G  
(4 satisfactory tests)

	Thatcher	Lee	W-555	Nugget	Stewart
Yield in bushels per acre.....	26.4	26.5	29.5	21.7	24.8
Days from seeding to ripening.....	—	—	—	—	—
Height of plants in inches.....	38.0	38.0	37.0	39.0	42.0
Straw strength (maximum of 10).....	—	—	—	—	—
Bushel weight in pounds.....	63.0	62.4	62.2	62.8	61.8
Commercial grades in percentage: 1 Nor. and 1 C.W....	40.0	40.0	40.0	40.0	20.0
2 Nor. and 2 C.W....	40.0	40.0	40.0	40.0	60.0
3 Nor. and 3 C.W....	20.0	—	20.0	—	—
4 Nor. and 4 C.W....	—	20.0	—	20.0	20.0

Necessary difference—4.0 bushels.

### Yield Performance During Recent Years—Zone 3G

**W-555** outyielded all other varieties in 1952, but its yield advantage can be considered significant only in the case of the two durum varieties, **Stewart** and **Nugget**. As this is the first year that W-555 has been tested the information obtained to date is not sufficient to warrant any recommendations.

**Lee** was second in yield, but exceeded only **Nugget** by a significant margin. It equalled **Thatcher** in yield during 1952, but was significantly outyielded by that variety in Wheat Pool tests conducted during 1950 and 1951. **Lee** is not recommended for this area.

**Thatcher** placed third in yield in 1952. As stated above it has had a marked yield advantage over **Lee** when the past three years' results are considered. Prior to 1952 **Thatcher** has always placed first or second in yield in this zone, and it is the only variety officially recommended.

**Stewart** ranked fourth in yield. It was used in Wheat Pool tests in this zone for the first time in 1952. Durum varieties are not recommended for Zone 3G.

**Nugget** placed fifth in yield in 1952, the first year it was included in these testing projects.

TABLE No. 23.—SUMMARIZED RESULTS FOR ZONE 4A  
(4 satisfactory tests)

	Thatcher	Lee	W-555	Nugget	Stewart
Yield in bushels per acre.....	44.9	36.5	40.1	37.3	38.2
Days from seeding to ripening.....	106.0	111.0	106.5	112.5	112.5
Height of plants in inches.....	38.5	36.5	39.5	39.5	47.5
Straw strength (maximum of 10).....	8.9	7.3	9.1	5.0	6.0
Bushel weight in pounds.....	63.6	62.2	62.8	63.4	62.8
Commercial grades in percentage: 1 Nor. and 1 C.W....	40.0	—	—	20.0	20.0
2 Nor. and 2 C.W....	40.0	60.0	80.0	40.0	20.0
3 Nor. and 3 C.W....	—	—	—	—	20.0
4 Nor. and 4 C.W....	—	—	—	20.0	20.0
No. 5 and 5 C.W.....	—	20.0	—	—	—
No. 6 and 6 C.W.....	20.0	20.0	20.0	20.0	20.0

Necessary difference—3.1 bushels.



### Yield Performance During Recent Years—Zone 4A

**Thatcher** outyielded all other varieties significantly in 1952. Thatcher has been included in Wheat Pool tests for the past fifteen years, and has been the top yielder in Zone 4A thirteen times. It is the only bread wheat variety officially recommended for this area.

**W-555** ranked second in yield during 1952, exceeding Lee by a significant margin. W-555 was not included in Wheat Pool tests in previous years.

**Stewart** placed third in yield in 1952. It was included in the tests in order to provide a comparison for Nugget, a new durum variety for which information was required from all parts of the province. Generally, durums are not recommended for this zone.

**Nugget** was fourth in yield during its first year of testing.

**Lee** ranked fifth in yield in 1952. It has been outyielded consistently by all other varieties in this zone during the past three years.

**TABLE No. 24.—SUMMARIZED RESULTS FOR ZONE 4B**  
(3 satisfactory tests)

	Thatcher	Lee	W-555	Nugget	Stewart
Yield in bushels per acre.....	30.1	25.9	30.5	19.2	18.3
Days from seeding to ripening.....	110.0	110.0	107.0	114.0	116.0
Height of plants in inches.....	38.5	37.5	36.5	38.5	47.0
Straw strength (maximum of 10).....	9.8	9.5	10.0	8.3	7.4
Bushel weight in pounds.....	62.3	61.7	62.0	61.0	61.3
Commercial grades in percentage:					
2 Nor. and 2 C.W.....	33.3	33.3	33.3	—	—
3 Nor. and 3 C.W.....	—	—	—	33.3	—
4 Nor. and 4 C.W.....	33.3	33.3	33.3	33.3	66.7
No. 5 and 5 C.W.....	33.4	—	—	—	33.3
No. 6 and 6 C.W.....	—	33.4	33.4	33.4	—

No significant grain yield difference between varieties.

### Yield Performance During Recent Years—Zone 4B

It should be pointed out that only three satisfactory tests were completed in this zone during the past year, and the differences in yield cannot be considered significant. Generally, however, the bread wheat varieties showed a considerable yield advantage over the durums.

As in all other zones **W-555** was included in Wheat Pool tests in this area for the first time in 1952. The information obtained so far is not sufficient to provide a basis for recommendations.

**Thatcher** yielded well, as it has done in each of the previous five years. This variety has given higher average yields over the period than any other bread wheat, and it is the only variety officially recommended for the zone.

**Lee** has been tested in Zone 4B during each of the past three years. While the yields in 1952 were not significantly different, this variety did not compare favorably with Thatcher in 1950 or 1951, and it is not officially recommended for use in this area.

**Nugget** and **Stewart**, the two durum varieties, were comparatively low in yield in this area. Durums are not recommended in this zone where the frost-free period is usually short.

TABLE No. 25

**Individual Summarized Results of All Tests—Wheat**

The results of all successful wheat tests are shown individually in the following table. The tests are listed in order of Wheat Pool districts and sub-districts. The zone in which each test was located is shown under the column headed "Cereal Variety Zone." Before consulting the following table the reader is advised to refer to the discussion on page 7, headed, "Facts to be Remembered in Reading and Studying Results."

**Important.**—It should be kept in mind that the results of a single test should not be used as the basis for the choice of a variety. A more reliable guide is the yield performance discussion in the summarization according to Cereal Variety Zones, which is based on a large number of tests conducted over a period of years.

**WHEAT POOL DISTRICT 1**

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per meas-ured bushel	Com-mercial grades	Grading remarks
<b>MERRILL COOPER, CARIEVALE</b>											
3A.....	1	1	A	Thatcher.....	14.6	105	28	7.8	62	1 N.	—
				Lee.....	15.3	107	27	7.0	63	1 N.	—
				W-555.....	16.7	104	29	7.3	62	1 N.	—
				Nugget.....	13.2	107	26	6.8	63	1 C.W.	—
				Stewart.....	18.7	106	29	6.8	64	1 C.W.	—
Necessary difference—2.9 bushels.											
<b>EDDIE NIELSEN, REDVERS</b>											
3A.....	1	2	A	Thatcher.....	30.9	114	37	8.3	61	1 N.	—
				Lee.....	29.6	117	37	9.3	65	1 N.	—
				W-555.....	33.8	118	38	9.5	63	1 N.	—
				Nugget.....	33.4	113	36	5.8	64	1 C.W.	—
				Stewart.....	34.8	118	45	9.3	65	1 C.W.	—
Necessary difference—2.5 bushels.											
<b>ROBERT J. HAWKER, GLEN EWEN</b>											
3A.....	1	3	A	Thatcher.....	5.4	—	—	—	59	2 N.	—
				Lee.....	5.5	—	—	—	60	3 N.	G., I.
				W-555.....	7.1	—	—	—	60	2 N.	—
				Nugget.....	2.8	—	—	—	58	3 C.W.	—
				Stewart.....	4.1	—	—	—	59	3 C.W.	—
Necessary difference—2.1 bushels.											
<b>GERALD W. BIBERDORF, FROBISHER</b>											
3A.....	1	4	A	Thatcher.....	15.5	—	37	7.8	56	4 N.	—
				Lee.....	21.6	—	37	8.3	59	2 N.	—
				W-555.....	26.5	—	38	8.8	58	2 N.	—
				Nugget.....	11.2	—	40	5.3	50	Feed	—
				Stewart.....	13.3	—	52	8.0	56	6 C.W.	—
Necessary difference—2.8 bushels.											
<b>CLIFFORD H. MOHNS, VIEWFIELD</b>											
2A.....	1	5	A	Thatcher.....	7.6	—	—	—	53	4 Spec.	—
				Chinook.....	7.7	—	—	—	53	4 Spec.	—
				W-555.....	5.0	—	—	—	57	3 N.	—
				Nugget.....	10.2	—	—	—	53	6 C.W.	—
				Stewart.....	7.5	—	—	—	54	5 C.W.	—
No significant grain yield difference between varieties.											
<b>GEORGE R. KUCHINKA, JR., MACOUN</b>											
2A.....	1	6	A	Thatcher.....	30.6	111	34	10.0	62	1 N.	—
				Chinook.....	27.1	116	36	10.0	64	1 N.	—
				W-555.....	31.2	112	34	10.0	63	2 N.	I.
				Nugget.....	43.0	115	37	6.8	64	2 C.W.	I.
				Stewart.....	44.5	116	42	7.8	65	2 C.W.	I.
Necessary difference—2.3 bushels.											
<b>GLENWOOD VOECHTING, TRIBUNE</b>											
2A.....	1	7	A	Thatcher.....	21.6	102	34	9.0	57	3 N.	—
				Chinook.....	22.9	102	34	9.5	62	1 N.	—
				W-555.....	30.9	103	35	10.0	60	2 N.	S.G.
				Nugget.....	21.8	98	35	7.3	59	3 C.W.	—
				Stewart.....	29.7	103	46	8.5	60	2 C.W.	—
Necessary difference—3.1 bushels.											
<b>HAROLD E. CODERRE, KISBEY</b>											
2A.....	1	9	A	Thatcher.....	15.4	—	—	—	56	4 N.	—
				Chinook.....	13.2	—	—	—	57	3 N.	—
				W-555.....	32.4	—	—	—	59	2 N.	—
				Nugget.....	24.9	—	—	—	58	3 C.W.	—
				Stewart.....	16.9	—	—	—	57	4 C.W.	—
Necessary difference—4.8 bushels.											

# Wheat Pool District 1—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com-mercial grades	Grading remarks
<b>BOYD P. PEDERSEN, WAUCHOPE</b>											
3A.....	1	10	A	Thatcher.....	14.5	105	35	10.0	55	4 Spec.	—
				Lee.....	18.3	110	36	10.0	59	2 N.	—
				W-555.....	25.5	105	36	10.0	59	2 N.	S.E.
				Nugget.....	16.5	107	40	10.0	56	4 C.W.	—
				Stewart.....	10.7	111	50	10.0	56	4 C.W.	—
Necessary difference—3.4 bushels.											

## Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.

2A.....	1	8	A	Billy C. Cugnet, Weyburn.
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# WHEAT POOL DISTRICT 2

<b>GERMAIN FOSSENIER, RADVILLE</b>											
2A.....	2	1	A	Thatcher.....	10.7	—	—	—	58	2 N.	—
				Chinook.....	9.5	—	—	—	61	1 N.	—
				W-555.....	12.6	—	—	—	57	3 N.	—
				Nugget.....	12.5	—	—	—	59	3 C.W.	—
				Stewart.....	17.9	—	—	—	56	4 C.W.	—

No significant grain yield difference between varieties.

<b>EDMUND A. MAZUR, MINTON</b>											
1A.....	2	2	A	Thatcher.....	23.3	119	32	10.0	63	1 N.	—
				Chinook.....	21.1	119	33	9.5	64	1 N.	—
				W-555.....	28.2	121	33	10.0	63	1 N.	—
				Nugget.....	23.3	122	36	8.3	64	1 C.W.	—
				Stewart.....	26.4	122	45	7.5	64	1 C.W.	—

No significant grain yield difference between varieties.

<b>HOWARD VERBEURGT, CEYLON</b>											
2A.....	2	2	B	Thatcher.....	32.8	—	36	—	57	3 N.	—
				Chinook.....	30.5	—	40	—	62	2 N.	Bl.
				W-555.....	36.8	—	30	—	59	2 N.	—
				Nugget.....	41.8	—	38	—	62	2 C.W.	Bl.
				Stewart.....	42.2	—	42	—	65	2 C.W.	Bl.

Necessary difference—2.9 bushels.

<b>WAYNE THURLOW, BUFFALO GAP</b>											
1A.....	2	3	A	Thatcher.....	17.4	—	—	—	59	2 N.	—
				Chinook.....	16.5	—	—	—	62	1 N.	—
				W-555.....	18.4	—	—	—	61	2 N.	I.
				Nugget.....	15.3	—	—	—	62	2 C.W.	I.
				Stewart.....	18.5	—	—	—	63	2 C.W.	I.

No significant grain yield difference between varieties.

<b>LEO H. McKEE, STRATHALLEN</b>											
1A.....	2	5	A	Thatcher.....	20.9	113	31	9.0	63	1 N.	—
				Chinook.....	17.2	113	32	9.0	64	1 N.	—
				W-555.....	16.7	112	29	9.0	62	1 N.	—
				Nugget.....	18.4	113	29	9.0	65	1 C.W.	—
				Stewart.....	24.7	116	40	9.0	65	1 C.W.	—

Necessary difference—2.9 bushels.

<b>MARIAN F. BROEDER, MAXSTONE</b>											
1A.....	2	7	A	Thatcher.....	18.1	102	29	10.0	64	1 N.	—
				Chinook.....	17.8	102	30	9.3	64	1 N.	—
				W-555.....	15.6	102	28	10.0	63	1 N.	—
				Nugget.....	17.3	109	30	8.3	64	1 C.W.	—
				Stewart.....	23.1	113	39	8.0	65	1 C.W.	—

Necessary difference—2.6 bushels.

<b>DENNIS E. KROGSGAARD, BURES</b>											
1A.....	2	9	A	Thatcher.....	20.9	112	38	8.8	57	3 N.	—
				Chinook.....	19.4	112	40	7.0	60	2 N.	S.G.
				W-555.....	34.2	113	37	7.0	58	3 N.	D.G.
				Nugget.....	23.2	112	38	5.0	57	4 C.W.	—
				Stewart.....	27.0	117	49	6.5	55	5 C.W.	—

Necessary difference—5.5 bushels.

<b>ALBERT E. WEBB, AMULET</b>											
1A.....	2	10	A	Thatcher.....	19.1	120	38	6.8	57	3 N.	—
				Chinook.....	23.0	121	39	8.0	62	1 N.	—
				W-555.....	29.0	120	38	7.8	62	1 N.	—
				Nugget.....	25.7	119	39	6.3	60	2 C.W.	—
				Stewart.....	27.7	121	47	7.8	61	2 C.W.	—

Necessary difference—3.7 bushels.

### WHEAT POOL DISTRICT 3

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com-mercial grades	Grading remarks
<b>LEON GILBERTSON, FRONTIER</b>											
1C.....	3	4	A	Thatcher.....	35.1	116	34.2	10.0	62	1 N.	—
				Chinook.....	30.7	116	34.0	10.0	64	1 N.	—
				W-555.....	34.1	112	31.8	7.8	62	1 N.	—
				Nugget.....	32.6	116	34.2	10.0	63	1 C.W.	—
				Stewart.....	27.3	120	48.0	10.0	61	2 C.W.	—
Necessary difference—1.3 bushels.											
<b>KENNETH B. WENAAS, ROBSART</b>											
1C.....	3	5	A	Thatcher.....	28.1	124	36	10.0	61	2 N.	I.
				Chinook.....	20.1	126	36	10.0	63	1 N.	—
				W-555.....	20.5	126	35	10.0	60	2 N.	I.
				Nugget.....	21.8	126	36	8.5	63	1 C.W.	—
				Stewart.....	21.2	128	42	8.0	62	2 C.W.	I.
Necessary difference—4.4 bushels.											
<b>FRED J. SUTTER, SHAUNAVON</b>											
1A.....	3	8	A	Thatcher.....	46.7	114	31	10.0	64	1 N.	—
				Chinook.....	38.9	115	36	9.0	65	1 N.	—
				W-555.....	45.7	112	32	10.0	64	1 N.	—
				Nugget.....	—	115	30	6.0	64	1 C.W.	—
				Stewart.....	36.4	112	39	7.0	61	2 C.W.	—
Nugget yields discarded because of damage—test yields not used in zone summaries.											
<b>WALTER H. WERNICKE, CADILLAC</b>											
1A.....	3	9	A	Thatcher.....	8.1	—	—	10.0	62	1 N.	—
				Chinook.....	8.0	—	—	10.0	65	1 N.	—
				W-555.....	8.7	—	—	10.0	61	1 N.	—
				Nugget.....	11.9	—	—	10.0	64	1 C.W.	—
				Stewart.....	22.3	—	—	10.0	63	1 C.W.	—
Test damaged—yields not used in zone summaries.											
<b>CECIL L. OLIVER, CRICHTON</b>											
1A.....	3	9	B	Thatcher.....	17.2	—	22	10.0	62	2 N.	Bl.
				Chinook.....	16.6	—	24	9.5	64	1 N.	—
				W-555.....	17.1	—	23	10.0	62	2 N.	I.
				Nugget.....	13.9	—	24	8.0	64	2 C.W.	Stch.
				Stewart.....	24.8	—	30	7.8	66	2 C.W.	Stch.
Necessary difference—3.5 bushels.											
<b>W. JIM CROZIER, KINCAID</b>											
1A.....	3	10	A	Thatcher.....	17.4	—	—	—	56	4 N.	—
				Chinook.....	12.2	—	—	—	58	3 N.	I.
				W-555.....	13.8	—	—	—	55	No. 5	—
				Nugget.....	20.0	—	—	—	57	4 C.W.	—
				Stewart.....	19.8	—	—	—	60	3 C.W.	I.
Necessary difference—3.7 bushels.											
<b>BERNARD J. FIGOTT, ANEROID</b>											
1A.....	3	10	B	Thatcher.....	25.5	—	30	10.0	62	2 N.	—
				Chinook.....	18.0	—	34	10.0	63	1 N.	—
				W-555.....	21.2	—	31	10.0	61	2 N.	I.
				Nugget.....	20.2	—	32	7.8	63	1 C.W.	—
				Stewart.....	31.4	—	41	9.0	64	1 C.W.	—
Necessary difference—3.3 bushels.											
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>											
1C.....	3	6	A	Alvin E. Anderson, Eastend.							

### WHEAT POOL DISTRICT 4

<b>ERNEST W. EARL, SIDEWOOD</b>											
1B.....	4	1	A	Thatcher.....	28.0	—	30	9.3	65	1 Hard	—
				Chinook.....	26.2	—	33	10.0	66	1 Hard	—
				W-555.....	23.7	—	31	8.8	64	1 N.	—
				Nugget.....	25.3	—	31	9.5	66	1 C.W.	—
				Stewart.....	27.4	—	39	9.8	66	1 C.W.	S.E.
No significant grain yield difference between varieties.											
<b>GORDON C. A. FORD, MAPLE CREEK</b>											
1B.....	4	2	A	Thatcher.....	22.2	—	—	—	64	1 N.	—
				Chinook.....	17.7	—	—	—	64	1 N.	—
				W-555.....	20.4	—	—	—	63	1 N.	—
				Nugget.....	19.2	—	—	—	65	1 C.W.	—
				Stewart.....	16.5	—	—	—	66	2 C.W.	G.
No significant grain yield difference between varieties.											



### Wheat Pool District 4—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per meas-ured bushel	Com-mercial grades	Grading remarks
<b>HAROLD G. BENJAMIN, WEBB</b>											
1A .....	4	4	A	Thatcher.....	31.1	131	35	10.0	61	2 N.	Bl.
				Chinook.....	24.7	131	36	9.0	63	2 N.	Bl.
				W-555.....	28.2	131	34	10.0	61	2 N.	Bl.
				Nugget.....	29.6	131	32	7.5	63	3 C.W.	Stch., Bl.
				Stewart.....	31.1	138	41	8.0	66	3 C.W.	Stch., Bl.
Necessary difference—2.8 bushels.											
<b>LEONARD H. DOKKEN, FOSTERTON</b>											
1A .....	4	5	A	Thatcher.....	34.1	—	33	9.5	62	2 N.	I.
				Chinook.....	19.4	—	34	7.3	63	2 N.	I.
				W-555.....	26.4	—	34	8.5	62	2 N.	I.
				Nugget.....	10.5	—	31	8.3	63	2 C.W.	I.
				Stewart.....	24.1	—	33	7.5	65	2 C.W.	I.
Test badly damaged by shattering—yields not used in zone summaries.											
<b>L. VERNON ARNOLD, GOLDEN PRAIRIE</b>											
1B .....	4	6	A	Thatcher.....	31.6	—	—	—	62	1 N.	—
				Chinook.....	24.9	—	—	—	64	1 N.	—
				W-555.....	27.6	—	—	—	63	1 N.	—
				Nugget.....	29.0	—	—	—	65	2 C.W.	Stch.
				Stewart.....	38.3	—	—	—	65	2 C.W.	Stch.
Necessary difference—3.7 bushels.											
<b>LAWRENCE W. PUDWELL, RICHMOUND</b>											
1B .....	4	7	A	Thatcher.....	30.8	—	33	7.5	60	2 N.	Bl.
				Chinook.....	26.1	—	34	7.8	62	2 N.	Bl.
				W-555.....	25.2	—	31	7.0	57	3 N.	—
				Nugget.....	27.3	—	34	3.3	62	2 C.W.	Bl.
				Stewart.....	30.0	—	37	5.3	64	2 C.W.	Bl.
No significant grain yield difference between varieties.											
<b>RAYMOND E. RAYCHYBA, PRELATE</b>											
1A .....	4	8	A	Thatcher.....	28.2	—	—	—	58	4 N.	G., F.
				Chinook.....	18.9	—	—	—	60	4 N.	G., F.
				W-555.....	30.1	—	—	—	57	4 N.	G., F.
				Nugget.....	27.9	—	—	—	58	4 C.W.	F.
				Stewart.....	30.9	—	—	—	62	3 C.W.	F.
No significant grain yield difference between varieties.											
<b>DON M. ANDERSON, HAZLET</b>											
1A .....	4	10	A	Thatcher.....	31.5	107	31	9.0	65	1 Hard	—
				Chinook.....	25.4	107	33	9.0	66	1 Hard	—
				W-555.....	34.4	107	33	9.0	64	1 N.	—
				Nugget.....	28.8	120	35	7.0	65	2 C.W.	Bl.
				Stewart.....	40.9	120	42	7.0	67	1 C.W.	—
Necessary difference—3.5 bushels.											
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>											
2C .....	4	3	A	Caroline J. Stern, Wymark.							
1A.....	4	5	B	Edwin R. Wallace, Pennant.							
1B.....	4	8	B	Raymond L. Gill, Leader.							
1A.....	4	9	A	Laverne V. Nobbs, Lemsford.							

### WHEAT POOL DISTRICT 5

<b>R. RONALD CAMPBELL, VANTAGE</b>											
1A.....	5	1	A	Thatcher.....	16.4	—	—	7.0	60	1 N.	—
				Chinook.....	13.8	—	—	6.0	64	1 N.	—
				W-555.....	16.6	—	—	8.0	62	1 N.	—
				Nugget.....	16.3	—	—	10.0	64	1 C.W.	—
				Stewart.....	30.8	—	—	10.0	66	1 C.W.	—
Necessary difference—4.1 bushels.											
<b>VERNON OEHLERKING, GRAVELBOURG</b>											
1A .....	5	2	A	Thatcher.....	35.4	—	—	—	59	2 N.	—
				Chinook.....	26.1	—	—	—	61	1 N.	—
				W-555.....	32.3	—	—	—	59	2 N.	—
				Nugget.....	36.4	—	—	—	61	2 C.W.	—
				Stewart.....	41.8	—	—	—	63	2 C.W.	Bl.
No significant grain yield difference between varieties.											
<b>THOMAS J. RUNCIE, PAMBRUN</b>											
1A.....	5	3	A	Thatcher.....	45.5	104	38	9.5	62	2 N.	Bl.
				Chinook.....	36.2	105	41	9.8	64	1 N.	—
				W-555.....	44.1	103	39	9.3	62	1 N.	—
				Nugget.....	45.1	111	43	9.5	65	1 C.W.	—
				Stewart.....	41.6	117	51	10.0	65	1 C.W.	—
No significant grain yield difference between varieties.											

# Wheat Pool District 5—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per meas-ured bushel	Com-mercial grades	Grading remarks
<b>GEORGE A. JOHNSON, BRADDOCK</b>											
1A.....	5	4	A	Thatcher.....	42.1	—	—	—	61	3 N.	G., I.
				Chinook.....	41.0	—	—	—	63	3 N.	G., I.
				W-555.....	41.6	—	—	—	61	3 N.	G., I.
				Nugget.....	40.7	—	—	—	64	3 C.W.	G., I.
				Stewart.....	48.8	—	—	—	60	3 C.W.	G., I.
Necessary difference—3.1 bushels.											
<b>RALPH O. ARNOLD, SHAMROCK</b>											
1A.....	5	5	A	Thatcher.....	39.4	107	46	9.3	62	2 N.	I.
				Chinook.....	32.6	109	47	8.3	63	2 N.	I.
				W-555.....	38.9	108	46	8.8	62	2 N.	I.
				Nugget.....	41.9	112	43	7.8	65	2 C.W.	I.
				Stewart.....	47.1	114	53	8.0	63	2 C.W.	I.
Necessary difference—4.8 bushels.											
<b>RAYMOND J. RAMBOW, HODGEVILLE</b>											
1A.....	5	5	B	Thatcher.....	32.9	113	30	10.0	62	3 N.	D.G., I.
				Chinook.....	28.9	114	32	9.5	65	3 N.	G., I.
				W-555.....	31.5	113	30	9.8	62	3 N.	D.G., I.
				Nugget.....	30.5	114	27	6.3	64	3 C.W.	G., I.
				Stewart.....	40.1	114	35	7.8	65	3 C.W.	G., I.
Necessary difference—3.6 bushels.											
<b>NYAL M. ARISS, COURVAL</b>											
1A.....	5	6	A	Thatcher.....	43.1	—	30	9.0	63	1 N.	—
				Chinook.....	29.2	—	30	10.0	64	1 N.	—
				W-555.....	42.1	—	34	9.0	63	1 N.	—
				Nugget.....	43.3	—	45	8.0	65	1 C.W.	—
				Stewart.....	51.1	—	48	7.0	64	1 C.W.	—
Necessary difference—2.8 bushels.											
<b>P. WAYNE SHELDON, OLD WIVES</b>											
1A.....	5	6	B	Thatcher.....	42.0	124	42	8.3	62	1 N.	—
				Chinook.....	31.3	124	46	7.8	65	1 N.	—
				W-555.....	34.9	124	43	9.3	62	1 N.	—
				Nugget.....	58.4	129	43	5.8	64	1 C.W.	—
				Stewart.....	65.2	129	53	6.8	66	1 C.W.	—
Necessary difference—6.9 bushels.											
<b>LORENCE I. PETERSON, PARKBEG</b>											
1A.....	5	7	A	Thatcher.....	26.5	—	28	7.0	63	1 N.	—
				Chinook.....	17.9	—	32	6.0	63	1 N.	—
				W-555.....	25.5	—	30	9.0	63	1 N.	—
				Nugget.....	27.4	—	30	8.0	64	1 C.W.	—
				Stewart.....	28.3	—	41	10.0	64	1 C.W.	—
Necessary difference—4.6 bushels.											
<b>ROBERT G. McKAY, LOG VALLEY</b>											
1A.....	5	10	A	Thatcher.....	33.6	102	33	9.0	64	1 N.	—
				Chinook.....	27.5	102	35	10.0	64	1 N.	—
				W-555.....	30.2	103	32	10.0	63	1 N.	—
				Nugget.....	31.3	101	35	9.0	63	1 C.W.	—
				Stewart.....	30.6	101	43	8.0	64	1 C.W.	—
No significant grain yield difference between varieties.											
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>											
2B.....	5	8	A	Glen D. Smith, Brownlee.							
1A.....	5	9	A	Gordon May, Secretan.							

# WHEAT POOL DISTRICT 6

<b>PAUL DREHER, TYVAN</b>											
2A.....	6	1	A	Thatcher.....	22.2	—	—	—	61	2 N.	I.
				Chinook.....	18.7	—	—	—	62	2 N.	I.
				W-555.....	27.6	—	—	—	63	2 N.	I.
				Nugget.....	22.2	—	—	—	63	3 C.W.	I., Stch.
				Stewart.....	25.4	—	—	—	64	3 C.W.	I., Stch.
Necessary difference—3.9 bushels.											
<b>JOHN W. TOBIAS, VIBANK</b>											
3C.....	6	2	A	Thatcher.....	32.6	—	—	—	62	4 N.	F.
				Lee.....	34.2	—	—	—	63	4 N.	F.
				W-555.....	37.0	—	—	—	62	4 N.	F.
				Nugget.....	34.7	—	—	—	64	3 C.W.	F.
				Stewart.....	42.5	—	—	—	65	4 C.W.	F.
No significant grain yield difference between varieties.											

# Wheat Pool District 6—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed- ing to ripening	Plant height in inches	Straw strength	Lbs. per meas- ured bushel	Com- mercial grades	Grading remarks
<b>TONY R. THEAKER, WILCOX</b>											
2E.....	6	3	A	Thatcher.....	34.5	128	38	8.0	61	2 N.	Bl.
				Chinook.....	33.2	128	37	9.0	64	1 N.	—
				W-555.....	32.7	128	37	9.0	62	1 N.	—
				Nugget.....	44.2	131	39	8.0	64	1 C.W.	—
				Stewart.....	58.3	133	45	8.0	66	1 C.W.	—
Necessary difference—5.3 bushels.											
<b>WILFRED R. FILAZEK, SPRING VALLEY</b>											
1A.....	6	4	A	Thatcher.....	21.3	118	32	10.0	62	1 N.	—
				Chinook.....	19.8	118	32	10.0	62	1 N.	—
				W-555.....	27.5	118	32	9.5	62	1 N.	—
				Nugget.....	24.2	119	32	9.5	64	1 C.W.	—
				Stewart.....	26.5	119	32	9.8	64	1 C.W.	—
Necessary difference—3.6 bushels.											
<b>FRANCIS A. DUNLOP, BAILDON</b>											
1A.....	6	5	A	Thatcher.....	33.3	—	—	—	61	3 N.	G., I.
				Chinook.....	30.8	—	—	—	63	3 N.	G., I.
				W-555.....	36.3	—	—	—	62	3 N.	G., I.
				Nugget.....	46.7	—	—	—	64	2 C.W.	I.
				Stewart.....	40.6	—	—	—	62	3 C.W.	I.
Necessary difference—2.8 bushels.											
<b>G. ALLEN RASMUSSEN, ROULEAU</b>											
2E.....	6	6	A	Thatcher.....	33.2	115	41	8.0	63	1 N.	—
				Chinook.....	34.2	116	41	8.0	64	1 N.	—
				W-555.....	36.5	116	39	8.0	63	1 N.	—
				Nugget.....	48.0	115	40	7.7	65	1 C.W.	—
				Stewart.....	58.4	114	47	7.0	65	1 C.W.	—
Necessary difference—8.4 bushels.											
<b>ROBERT A. TAYLOR, RICHARDSON</b>											
2E.....	6	7	B	Thatcher.....	23.1	117	40	9.0	58	3 N.	F.
				Chinook.....	21.4	120	42	5.0	61	3 N.	I., F.
				W-555.....	26.9	119	40	9.0	60	3 N.	F.
				Nugget.....	29.8	120	40	5.0	61	3 C.W.	G., F.
				Stewart.....	32.6	120	56	5.0	62	3 C.W.	G.
Necessary difference—3.0 bushels.											
<b>DOUGLAS WILLISON, QU'APPELLE</b>											
3C.....	6	8	A	Thatcher.....	26.0	121	35	9.5	63	1 N.	—
				Lee.....	27.2	124	36	9.0	62	2 N.	I.
				W-555.....	30.1	120	35	9.8	63	1 N.	—
				Nugget.....	24.7	121	40	5.8	63	1 C.W.	—
				Stewart.....	26.4	127	48	8.0	63	1 C.W.	—
No significant grain yield difference between varieties.											
<b>WILLIAM J. MLAZGAR, FORT QU'APPELLE</b>											
3C.....	6	9	A	Thatcher.....	24.8	—	—	—	61	3 N.	F.
				Lee.....	17.3	—	—	—	60	4 N.	F.
				W-555.....	19.3	—	—	—	61	3 N.	F.
				Nugget.....	19.3	—	—	—	63	3 C.W.	F.
				Stewart.....	23.2	—	—	—	63	4 C.W.	F.
No significant grain yield difference between varieties.											
<b>EARL P. BEATTIE, TREGARVA</b>											
2E.....	6	10	A	Thatcher.....	35.2	—	—	—	62	1 N.	—
				Chinook.....	23.1	—	—	—	63	1 N.	—
				W-555.....	32.6	—	—	—	62	1 N.	—
				Nugget.....	38.4	—	—	—	64	1 C.W.	—
				Stewart.....	42.3	—	—	—	64	1 C.W.	—
Necessary difference—4.1 bushels.											
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>											
2E.....	6	3	B	Howard W. Ross, Milestone.							
2E.....	6	7	A	Richard T. Lowery, Regina.							

# WHEAT POOL DISTRICT 7

<b>DICK F. THOMPSON, KELSO</b>											
3A.....	7	1	A	Thatcher.....	18.4	112	35	8.8	58	3 N.	I.
				Lee.....	22.8	117	37	9.3	61	3 N.	F.
				W-555.....	25.9	111	38	9.3	62	3 N.	I.
				Nugget.....	17.3	106	36	5.8	61	3 C.W.	I.
				Stewart.....	13.7	108	47	8.0	60	3 C.W.	I.
Necessary difference—2.4 bushels.											

# Wheat Pool District 7—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed- ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com- mercial grades	Grading remarks
<b>EDWARD A. PLEWES, MOOSOMIN</b>											
3B.....	7	2	A	Thatcher.....	12.5	122	39	9.0	61	2 N.	Bl.
				Lee.....	7.7	123	37	5.0	59	2 N.	—
				W-555.....	7.6	124	41	5.0	59	2 N.	—
				Nugget.....	8.2	123	44	8.0	61	2 C.W.	—
				Stewart.....	17.1	124	56	7.0	64	2 C.W.	Stch.
Test damaged by shattering—yields not used in zone summaries.											
<b>FRANK EASTON, JR., KENNEDY</b>											
3A.....	7	3	A	Thatcher.....	48.6	—	41	10.0	64	3 N.	Stch.
				Lee.....	53.7	—	38	10.0	65	2 N.	S.Stch.,S.B.P.
				W-555.....	59.7	—	38	10.0	65	2 N.	S. Stch.
				Nugget.....	42.2	—	41	7.0	64	2 C.W.	S. Stch.
				Stewart.....	51.6	—	54	5.5	66	3 C.W.	Stch.
Necessary difference—7.1 bushels.											
<b>VAL. L. PEARSON, KIPLING</b>											
3A.....	7	4	A	Thatcher.....	58.5	—	—	—	62	2 N.	I.
				Lee.....	47.6	—	—	—	60	3 N.	G., I.
				W-555.....	49.1	—	—	—	62	3 N.	G., I.
				Nugget.....	54.5	—	—	—	62	2 C.W.	I.
				Stewart.....	54.0	—	—	—	59	3 C.W.	—
No significant grain yield difference between varieties.											
<b>LORNE P. McDOUGALL, CORNING</b>											
3A.....	7	5	A	Thatcher.....	13.9	—	—	—	64	2 N.	S. Stch.
				Lee.....	14.8	—	—	—	63	3 N.	Stch., G.
				W-555.....	15.7	—	—	—	63	3 N.	Stch.
				Nugget.....	14.9	—	—	—	63	3 C.W.	Stch.
				Stewart.....	18.8	—	—	—	59	3 C.W.	Stch.
No significant grain yield difference between varieties.											
<b>DANIEL LUSTER, KENDAL</b>											
2A.....	7	6	A	Thatcher.....	29.7	103	—	10.0	61	1 N.	—
				Chinook.....	30.1	109	—	10.0	63	1 N.	—
				W-555.....	27.2	104	—	10.0	62	1 N.	—
				Nugget.....	21.3	106	—	9.0	62	1 C.W.	—
				Stewart.....	35.0	103	—	9.5	64	1 C.W.	—
Necessary difference—3.7 bushels.											
<b>ALFRED BEITEL, ROCANVILLE</b>											
3C.....	7	8	A	Thatcher.....	23.3	112	35	8.5	62	1 N.	S.E.
				Lee.....	24.5	118	33	9.8	63	2 N.	I., S.E.
				W-555.....	28.4	112	34	8.8	62	2 N.	I., S.E.
				Nugget.....	23.0	117	36	6.3	63	1 C.W.	S.E.
				Stewart.....	25.6	121	47	7.8	64	1 C.W.	S.E.
Necessary difference—2.7 bushels.											
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>											
3B.....	7	9	A	Lawrence Twardzik, Spy Hill.							
3C.....	7	10	A	Alvin J. Nicholauson, Esterhazy.							

# WHEAT POOL DISTRICT 8

<b>AMBROSIE SOBKOW, CALDER</b>											
3B.....	8	1	A	Thatcher.....	27.3	—	—	—	63	1 N.	—
				Lee.....	26.4	—	—	—	64	1 N.	—
				W-555.....	22.6	—	—	—	63	1 N.	—
				Nugget.....	26.4	—	—	—	64	1 C.W.	—
				Stewart.....	30.2	—	—	—	63	2 C.W.	Pk., Stch.
No significant grain yield difference between varieties.											
<b>FLORANCE M. LEGGE, SALTCOATS</b>											
3B.....	8	2	A	Thatcher.....	34.0	116	37	10.0	64	2 N.	I.
				Lee.....	27.2	122	36	6.0	63	3 N.	G., I.
				W-555.....	33.2	116	36	10.0	63	2 N.	I.
				Nugget.....	31.6	122	40	8.0	64	2 C.W.	I.
				Stewart.....	34.4	129	48	6.0	65	2 C.W.	I.
Necessary difference—1.9 bushels.											
<b>ALVIN A. MILLER, CANA</b>											
3C.....	8	3	A	Thatcher.....	18.9	—	—	—	63	1 N.	—
				Lee.....	16.5	—	—	—	62	3 N.	D.G.
				W-555.....	19.7	—	—	—	63	2 N.	G.
				Nugget.....	16.9	—	—	—	63	1 C.W.	—
				Stewart.....	17.4	—	—	—	64	1 C.W.	—
No significant grain yield difference between varieties.											



# Wheat Pool District 8—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per meas-ured bushel	Com-mercial grades	Grading remarks
<b>GERALD KOWAL, WILLOWBROOK</b>											
3C.....	8	4	A	Thatcher.....	38.0	103	31	10.0	65	1 N.	—
				Lee.....	30.6	104	30	10.0	64	2 N.	D., I.
				W-555.....	32.7	104	30	10.0	64	1 N.	—
				Nugget.....	27.6	114	30	10.0	63	2 C.W.	B.P.
				Stewart.....	24.6	113	30	10.0	64	2 C.W.	B.P.

Necessary difference—3.0 bushels.

<b>DONALD BERNDT, VERIGIN</b>											
3B.....	8	5	A	Thatcher.....	13.2	115	33	—	62	2 N.	I.
				Lee.....	22.7	113	36	—	63	3 N.	G., I.
				W-555.....	17.9	114	31	—	63	2 N.	I.
				Nugget.....	22.0	119	38	—	64	3 C.W.	G., I.
				Stewart.....	31.1	118	46	—	65	3 C.W.	G., I.

Tests damaged by livestock—yields not used in zone summaries.

<b>VIOLET KRAYNICK, AMSTERDAM</b>											
3B.....	8	6	A	Thatcher.....	39.5	109	34	10.0	62	1 N.	—
				Lee.....	34.7	110	34	10.0	63	2 N.	G.
				W-555.....	38.1	106	33	10.0	64	1 N.	—
				Nugget.....	35.8	107	36	8.8	61	2 C.W.	—
				Stewart.....	33.4	109	45	10.0	63	1 C.W.	—

Necessary difference—2.5 bushels.

<b>ALEX GELETCHUK, RAMA</b>											
3C.....	8	7	A	Thatcher.....	44.5	105	35	10.0	64	1 N.	—
				Lee.....	38.0	105	34	10.0	62	2 N.	I.
				W-555.....	45.4	105	36	10.0	63	2 N.	I.
				Nugget.....	38.4	112	37	6.0	63	1 C.W.	—
				Stewart.....	42.4	112	45	6.8	64	1 C.W.	—

No significant grain yield difference between varieties.

<b>WAYNE G. LOWE, HINCHLIFFE</b>											
4A.....	8	8	A	Thatcher.....	34.5	—	—	—	64	2 N.	I.
				Lee.....	26.9	—	—	—	64	2 N.	I.
				W-555.....	31.3	—	—	—	64	2 N.	I.
				Nugget.....	28.7	—	—	—	65	2 C.W.	Stch.
				Stewart.....	28.0	—	—	—	65	2 C.W.	Stch.

No significant grain yield difference between varieties.

<b>OPHELIA OCHITWA, NORQUAY</b>											
3B.....	8	9	A	Thatcher.....	59.8	103	—	10.0	58	No. 6	Spr., M.
				Lee.....	57.5	105	—	10.0	56	No. 6	Spr., M.
				W-555.....	55.4	103	—	10.0	59	No. 6	Spr., M.
				Nugget.....	52.5	108	—	8.0	60	5 C.W.	Spr., M.
				Stewart.....	50.2	109	—	8.0	57	6 C.W.	Spr., M.

No significant grain yield difference between varieties.

<b>ALLAN A. LISTER, PELLY</b>											
3B.....	8	10	A	Thatcher.....	45.6	—	—	—	62	3 N.	G., I.
				Lee.....	41.7	—	—	—	60	4 N.	F., I.
				W-555.....	40.0	—	—	—	61	3 N.	F.
				Nugget.....	47.3	—	—	—	62	3 C.W.	F.
				Stewart.....	53.6	—	—	—	63	3 C.W.	F.

Necessary difference—4.4 bushels.

<b>DAVID C. SALMOND, WEEKES</b>											
3F.....	8	11	A	Thatcher.....	44.5	—	34	9.0	62	3 N.	I.
				Lee.....	36.2	—	39	10.0	61	4 N.	D., I.
				W-555.....	36.3	—	32	10.0	61	3 N.	I.
				Nugget.....	23.7	—	42	10.0	63	2 C.W.	I.
				Stewart.....	34.3	—	44	3.0	58	3 C.W.	—

Necessary difference—6.4 bushels.

# WHEAT POOL DISTRICT 9

<b>A. GORDON EYRE, ITUNA</b>											
3C.....	9	1	A	Thatcher.....	26.0	—	—	—	61	3 N.	Bl., F.
				Lee.....	18.8	—	—	—	59	4 N.	F.
				W-555.....	20.6	—	—	—	60	4 N.	F.
				Nugget.....	21.4	—	—	—	61	4 C.W.	F.
				Stewart.....	29.9	—	—	—	62	4 C.W.	F.

Necessary difference—3.0 bushels.

<b>R. ARTHUR WILLIAMS, CUPAR</b>											
3C.....	9	2	A	Thatcher.....	34.3	—	—	—	64	1 N.	—
				Lee.....	32.0	—	—	—	64	2 N.	I.
				W-555.....	28.3	—	—	—	62	2 N.	I.
				Nugget.....	30.7	—	—	—	64	2 C.W.	Stch.
				Stewart.....	37.0	—	—	—	65	1 C.W.	—

Samples incomplete—yields not used in zone summaries.

# Wheat Pool District 9—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com-mercial grades	Grading remarks
<b>JOHN M. HALLIDAY, LESTOCK</b>											
3C.....	9	3	A	Thatcher.....	48.5	123	37	9.0	64	3 N.	I.
				Lee.....	45.5	126	38	10.0	62	4 N.	G., I.
				W-555.....	48.4	119	37	8.0	63	3 N.	I.
				Nugget.....	34.4	138	36	7.0	63	3 C.W.	G., I.
				Stewart.....	41.2	136	45	8.0	64	3 C.W.	G., I.
Necessary difference—3.8 bushels.											
<b>GERALD V. COOK, EARL GREY</b>											
3C.....	9	4	A	Thatcher.....	34.4	—	35	10.0	63	2 N.	I.
				Lee.....	24.8	—	36	10.0	63	3 N.	I.
				W-555.....	31.6	—	36	10.0	62	3 N.	I.
				Nugget.....	30.2	—	36	10.0	65	2 C.W.	I.
				Stewart.....	27.0	—	50	10.0	66	2 C.W.	I.
No significant grain yield difference between varieties.											
<b>RONALD A. LARSEN, GOVAN</b>											
2B.....	9	5	A	Thatcher.....	30.0	93	31	10.0	65	1 N.	—
				Chinook.....	23.4	95	33	9.8	65	1 N.	—
				W-555.....	29.3	93	32	9.3	64	1 N.	—
				Nugget.....	22.3	97	32	9.3	63	1 C.W.	—
				Stewart.....	20.3	103	37	9.0	62	2 C.W.	I.
Necessary difference—2.3 bushels.											
<b>KENNETH ROCKEL, LANIGAN</b>											
3C.....	9	6	A	Thatcher.....	28.3	—	32	8.0	62	2 N.	Bl.
				Lee.....	18.7	—	29	8.0	61	3 N.	G., I.
				W-555.....	17.7	—	27	9.0	60	3 N.	G., I.
				Nugget.....	23.3	—	32	7.8	63	2 C.W.	I.
				Stewart.....	24.6	—	44	8.0	65	1 C.W.	—
Necessary difference—4.4 bushels.											
<b>DOUGLAS J. SMITH, DAFOE</b>											
2B.....	9	8	A	Thatcher.....	16.9	—	—	—	61	2 N.	Bl.
				Chinook.....	13.7	—	—	—	63	1 N.	—
				W-555.....	14.4	—	—	—	61	2 N.	I.
				Nugget.....	13.7	—	—	—	62	2 C.W.	B.P.
				Stewart.....	16.7	—	—	—	65	1 C.W.	—
Necessary difference—1.6 bushels.											
<b>WALTER R. PERRY, WISHART</b>											
3C.....	9	9	A	Thatcher.....	32.2	—	38	—	63	2 N.	I.
				Lee.....	27.4	—	37	—	62	4 N.	G., I.
				W-555.....	30.2	—	37	—	64	2 N.	I.
				Nugget.....	31.6	—	38	—	63	3 C.W.	I.
				Stewart.....	35.6	—	48	—	64	3 C.W.	I.
Necessary difference—3.7 bushels.											

## WHEAT POOL DISTRICT 10

<b>ALBERT GARTNER, HOLDFAST</b>											
2B.....	10	1	A	Thatcher.....	52.3	103	40	9.0	64	1 N.	—
				Chinook.....	44.8	102	43	9.0	64	1 N.	—
				W-555.....	45.9	100	40	8.3	63	1 N.	—
				Nugget.....	48.0	108	42	7.0	66	1 C.W.	—
				Stewart.....	46.1	105	50	8.5	65	1 C.W.	—
No significant grain yield difference between varieties.											
<b>W. R. CHARLES NUGENT, DILKE</b>											
2B.....	10	1	B	Thatcher.....	20.5	117	28	6.2	61	2 N.	Bl.
				Chinook.....	16.3	117	28	6.0	63	2 N.	Bl.
				W-555.....	18.7	118	28	6.7	60	2 N.	Bl.
				Nugget.....	22.5	126	30	9.7	64	2 C.W.	Stch.
				Stewart.....	27.8	132	31	10.0	66	2 C.W.	Stch.
Necessary difference—3.3 bushels.											
<b>WAYNE L. WILSON, TUGASKE</b>											
2B.....	10	2	A	Thatcher.....	35.2	—	—	—	62	1 N.	—
				Chinook.....	27.1	—	—	—	63	1 N.	—
				W-555.....	31.9	—	—	—	62	1 N.	—
				Nugget.....	37.5	—	—	—	65	1 C.W.	—
				Stewart.....	50.6	—	—	—	65	1 C.W.	—
Necessary difference—6.4 bushels.											
<b>LLOYD E. MALLETT, WISETON</b>											
1A.....	10	4	A	Thatcher.....	34.5	—	32	9.8	63	1 N.	—
				Chinook.....	29.5	—	34	9.3	63	1 N.	—
				W-555.....	32.3	—	31	9.0	63	1 N.	—
				Nugget.....	32.8	—	34	8.5	62	1 C.W.	—
				Stewart.....	26.4	—	38	8.5	61	2 C.W.	—
No significant grain yield difference between varieties.											

# Wheat Pool District 10—Continued

Cereals Variety Zone	Dist.	Sub- Dist.	Test design- ation	Varieties	Yield bus. per acre	Days seed- ing to ripening	Plant height in inches	Straw strength	Lbs. per meas- ured bushel	Com- mercial grades	Grading remarks
<b>REGINALD E. PEACHEY, BRATTON</b>											
2B.....	10	5	A	Thatcher.....	30.0	94	36	9.8	63	1 N.	—
				Chinook.....	26.4	94	37	10.0	65	1 N.	—
				W-555.....	30.4	92	36	10.0	62	1 N.	—
				Nugget.....	26.2	96	33	10.0	64	1 C.W.	—
				Stewart.....	26.1	98	40	10.0	65	1 C.W.	—
Necessary difference—1.6 bushels.											
<b>REX H. FRIEND, HAWARDEN</b>											
2B.....	10	6	A	Thatcher.....	35.3	109	32	9.3	63	1 N.	—
				Chinook.....	30.6	109	33	10.0	65	1 N.	—
				W-555.....	35.6	107	32	9.0	63	2 N.	G.
				Nugget.....	24.8	111	30	8.3	64	1 C.W.	—
				Stewart.....	30.7	112	36	8.5	65	1 C.W.	—
Necessary difference—2.5 bushels.											
<b>EDWARD C. GROSS, SIMPSON</b>											
2B.....	10	8	A	Thatcher.....	25.3	—	41	9.8	63	4 N.	F.
				Chinook.....	23.7	—	42	10.0	63	4 N.	F.
				W-555.....	27.8	—	43	10.0	64	4 N.	D., I.
				Nugget.....	13.0	—	43	7.3	64	4 C.W.	F.
				Stewart.....	5.5	—	45	10.0	64	4 C.W.	F.
Nugget and Stewart damaged by birds—yields not used in zone summaries.											
<b>ALAN L. WOLFE, IMPERIAL</b>											
2B.....	10	8	B	Thatcher.....	41.0	—	37	10.0	61	1 N.	—
				Chinook.....	33.9	—	36	10.0	63	1 N.	—
				W-555.....	38.8	—	36	10.0	59	2 N.	—
				Nugget.....	34.5	—	34	7.0	63	1 C.W.	—
				Stewart.....	32.6	—	36	8.8	62	1 C.W.	—
Necessary difference—2.4 bushels.											
<b>RONALD M. EVANS, KENASTON</b>											
2B.....	10	9	A	Thatcher.....	16.9	—	—	—	60	2 N.	Bl.
				Chinook.....	12.5	—	—	—	62	2 N.	I.
				W-555.....	12.9	—	—	—	60	2 N.	I.
				Nugget.....	18.3	—	—	—	61	2 C.W.	—
				Stewart.....	18.2	—	—	—	59	3 C.W.	—
Necessary difference—3.3 bushels.											
<b>GAY SCOTT AND JOE NEUFELD, LAURA</b>											
2B.....	10	10	A	Thatcher.....	29.8	—	33	10.0	64	1 N.	—
				Chinook.....	25.4	—	29	10.0	66	1 N.	—
				W-555.....	27.1	—	30	10.0	63	1 N.	—
				Nugget.....	28.0	—	36	10.0	66	1 C.W.	—
				Stewart.....	26.3	—	39	10.0	66	1 C.W.	—
No significant grain yield difference between varieties.											
<b>MEL J. SCHUMACHER, DONAVON</b>											
2B.....	10	10	B	Thatcher.....	32.0	—	—	—	63	3 N.	D.G.
				Chinook.....	25.3	—	—	—	65	2 N.	G.
				W-555.....	25.3	—	—	—	62	3 N.	D.G.
				Nugget.....	25.8	—	—	—	63	2 C.W.	G.
				Stewart.....	32.6	—	—	—	65	1 C.W.	—
Necessary difference—1.9 bushels.											
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>											
1A.....	10	3	A	Benny L. Braun, Beechy.							
1A.....	10	4	B	Jack M. McDonald, Wiseton.							

# WHEAT POOL DISTRICT 11

<b>JOHN H. HEATH, KYLE</b>											
1A.....	11	1	A	Thatcher.....	27.3	—	—	—	62	1 N.	—
				Chinook.....	25.1	—	—	—	64	1 N.	—
				W-555.....	25.0	—	—	—	59	2 N.	—
				Nugget.....	20.7	—	—	—	63	1 C.W.	—
				Stewart.....	16.8	—	—	—	63	1 C.W.	—
Necessary difference—3.6 bushels.											
<b>JOAN NELSON, MANTARIO</b>											
1B.....	11	4	A	Thatcher.....	45.5	—	—	8.0	62	1 N.	—
				Chinook.....	35.8	—	—	8.0	65	1 N.	—
				W-555.....	44.5	—	—	7.0	62	1 N.	—
				Nugget.....	37.9	—	—	5.0	64	1 C.W.	S.E.
				Stewart.....	41.6	—	—	3.0	66	1 C.W.	S.E.
No significant grain yield difference between varieties.											

# Wheat Pool District 11—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per meas-ured bushel	Com-mercial grades	Grading remarks
<b>W. KENNETH BEWS, EATONIA</b>											
1B.....	11	4	B	Thatcher.....	24.5	102	36	—	65	1 N.	—
				Chinook.....	21.6	103	36	—	65	1 N.	—
				W-555.....	24.6	102	50	—	63	1 N.	—
				Nugget.....	19.3	103	36	—	66	1 C.W.	—
				Stewart.....	19.7	117	36	—	65	1 C.W.	—
No significant grain yield difference between varieties.											
<b>DOROTHY GOLIGHTLY, MANTARIO</b>											
1B.....	11	4	C	Thatcher.....	33.4	104	37	10.0	65	1 N.	—
				Chinook.....	29.1	102	39	10.0	66	1 N.	—
				W-555.....	31.2	101	37	10.0	65	1 N.	—
				Nugget.....	31.1	102	39	6.0	66	1 C.W.	—
				Stewart.....	32.9	109	47	10.0	67	1 C.W.	—
Necessary difference—1.9 bushels—Not included in zone summaries.											
<b>LLOYD E. NEAR, PINKHAM</b>											
1B.....	11	5	A	Thatcher.....	25.2	—	36	—	61	3 N.	F.
				Chinook.....	22.6	—	40	—	61	3 N.	F.
				W-555.....	23.4	—	40	—	61	3 N.	F.
				Nugget.....	19.8	—	40	—	63	3 C.W.	F.
				Stewart.....	29.8	—	40	—	61	3 C.W.	F.
Necessary difference—4.5 bushels.											
<b>JAMES L. McCULLOUGH, FLAXCOMBE</b>											
1B.....	11	5	B	Thatcher.....	24.0	—	—	—	62	2 N.	Bl.
				Chinook.....	23.2	—	—	—	64	1 N.	—
				W-555.....	22.6	—	—	—	61	1 N.	—
				Nugget.....	19.1	—	—	—	63	1 C.W.	—
				Stewart.....	26.0	—	—	—	63	1 C.W.	—
Necessary difference—3.1 bushels.											
<b>G. ROSS MOXLEY, ROSETOWN</b>											
2B.....	11	7	A	Thatcher.....	37.7	—	—	—	63	3 N.	G., I.
				Chinook.....	33.8	—	—	—	64	2 N.	I.
				W-555.....	30.5	—	—	—	62	3 N.	G., I.
				Nugget.....	35.8	—	—	—	65	1 C.W.	—
				Stewart.....	45.6	—	—	—	65	1 C.W.	—
Necessary difference—6.1 bushels.											
<b>ALBERT H. WIENS, HERSCHEL</b>											
2F.....	11	8	A	Thatcher.....	26.5	119	29	9.0	63	1 N.	—
				Chinook.....	25.5	119	31	8.8	64	1 N.	—
				W-555.....	28.6	119	29	9.0	63	1 N.	S.E.
				Nugget.....	24.5	119	31	5.8	63	1 C.W.	S.E.
				Stewart.....	33.3	121	38	5.5	64	1 C.W.	S.E.
No significant grain yield difference between varieties.											
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>											
2F.....	11	2	A	Patricia M. Calwell, Elrose.							
2F.....	11	9	A	Ralph G. Hurst, Dodsland.							

# WHEAT POOL DISTRICT 12

<b>RALPH DONAHUE, BIGGAR</b>											
2D.....	12	1	A	Thatcher.....	21.4	—	—	—	63	3 N.	G., I.
				Chinook.....	16.1	—	—	—	64	2 N.	I.
				W-555.....	19.5	—	—	—	62	3 N.	G., I.
				Nugget.....	13.7	—	—	—	61	3 C.W.	G., I.
				Stewart.....	18.2	—	—	—	63	3 C.W.	G., I.
Necessary difference—2.8 bushels.											
<b>PAUL S. VERETONIK, LIZARD LAKE</b>											
2D.....	12	2	A	Thatcher.....	36.8	106	36	10.0	64	1 N.	—
				Chinook.....	23.2	106	35	9.8	65	1 N.	—
				W-555.....	34.4	106	35	10.0	63	2 N.	I.
				Nugget.....	20.4	105	33	8.5	61	2 C.W.	—
				Stewart.....	15.8	106	36	8.8	59	3 C.W.	—
Test damaged—yields not used in zone summaries.											
<b>LINUS C. SCHERMAN, LEIPZIG</b>											
2D.....	12	3	A	Thatcher.....	29.4	—	—	—	61	3 N.	F., S.E.
				Chinook.....	24.9	—	—	—	62	3 N.	F.
				W-555.....	30.9	—	—	—	61	3 N.	F.
				Nugget.....	21.0	—	—	—	63	3 C.W.	F.
				Stewart.....	26.8	—	—	—	62	3 C.W.	F., S.E.
Necessary difference—3.0 bushels.											



# Wheat Pool District 12—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per meas-ured bushel	Com-mercial grades	Grading remarks
<b>WERNER A. AFFELDT, KERROBERT</b>											
2D.....	12	4	A	Thatcher.....	44.2	109	34	10.0	65	3 N.	F.
				Chinook.....	29.5	109	34	10.0	64	2 N.	I.
				W-555.....	41.2	109	34	10.0	63	3 N.	F.
				Nugget.....	32.9	112	36	7.5	65	2 C.W.	I.
				Stewart.....	40.3	111	36	8.7	65	2 C.W.	I.
Necessary difference—4.4 bushels—Not included in zone summaries.											
<b>BILLY H. SOPYC, TAKO</b>											
2D.....	12	5	A	Thatcher.....	22.1	—	30	8.8	64	1 N.	—
				Chinook.....	20.4	—	31	9.0	65	1 N.	—
				W-555.....	26.5	—	29	9.0	63	1 N.	—
				Nugget.....	17.5	—	27	8.0	65	1 C.W.	S.E.
				Stewart.....	23.0	—	34	7.0	64	1 C.W.	—
Necessary difference—2.9 bushels.											
<b>W. LAWRENCE FEIL, CACTUS LAKE</b>											
2D.....	12	6	A	Thatcher.....	37.5	—	26	7.5	59	3 N.	I.
				Chinook.....	26.8	—	30	7.8	62	2 N.	I.
				W-555.....	39.1	—	25	8.3	59	3 N.	I.
				Nugget.....	29.9	—	26	4.5	59	3 C.W.	—
				Stewart.....	30.1	—	26	5.0	64	2 C.W.	I.
Returns incomplete due to damage—yields not used in zone summaries.											
<b>EDWIN J. STANG, PRIMATE</b>											
2D.....	12	6	B	Thatcher.....	40.0	—	—	—	63	1 N.	—
				Chinook.....	32.1	—	—	—	64	1 N.	—
				W-555.....	38.5	—	—	—	63	1 N.	—
				Nugget.....	34.1	—	—	—	64	1 C.W.	—
				Stewart.....	29.6	—	—	—	62	2 C.W.	I.
Necessary difference—4.6 bushels.											
<b>DONALD J. MARSHALL, WINTER</b>											
3E.....	12	7	A	Thatcher.....	41.9	116	42	9.8	62	3 N.	G., I.
				Lee.....	41.7	115	42	9.8	61	3 N.	F.
				W-555.....	45.3	114	42	10.0	62	3 N.	F.
				Nugget.....	45.8	113	43	8.0	63	3 C.W.	I.
				Stewart.....	44.0	113	53	8.3	63	3 C.W.	I.
No significant grain yield difference between varieties.											
<b>KEITH E. HINCH, NEILBURG</b>											
3E.....	12	8	A	Thatcher.....	38.7	—	37	9.3	62	4 N.	F.
				Lee.....	35.7	—	37	8.8	61	No. 5	F.
				W-555.....	43.1	—	37	9.5	62	4 N.	F.
				Nugget.....	34.8	—	38	6.8	63	4 C.W.	F.
				Stewart.....	44.1	—	49	7.5	63	4 C.W.	F.
Necessary difference—4.8 bushels.											
<b>ROBERT B. MARLING, CARRUTHERS</b>											
3E.....	12	8	B	Thatcher.....	41.3	—	—	10.0	62	No. 6	F.
				Lee.....	45.6	—	—	9.0	60	No. 6	F.
				W-555.....	47.8	—	—	8.0	62	No. 6	F.
				Nugget.....	32.8	—	—	7.0	61	6 C.W.	F.
				Stewart.....	44.3	—	—	5.0	61	6 C.W.	F.
Necessary difference—5.6 bushels.											
<b>WARREN W. WISMER, CUTKNIFF</b>											
3E.....	12	9	B	Thatcher.....	30.9	130	38	9.0	64	3 N.	F.
				Lee.....	26.1	136	37	9.3	61	4 N.	F.
				W-555.....	30.4	132	38	9.8	63	3 N.	F.
				Nugget.....	26.6	138	37	7.0	64	3 C.W.	F.
				Stewart.....	40.7	136	49	9.0	65	1 C.W.	—
Necessary difference—3.0 bushels.											
<b>GUY R. LACOURSIERE, HIGHGATE</b>											
3G.....	12	10	A	Thatcher.....	21.4	103	38	—	62	2 N.	I.
				Lee.....	20.3	110	37	—	61	2 N.	I.
				W-555.....	22.6	105	40	—	61	2 N.	I.
				Nugget.....	14.2	107	42	—	64	2 C.W.	I.
				Stewart.....	16.3	108	49	—	64	2 C.W.	I.
Necessary difference—4.8 bushels.											
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>											
2D.....	12	9	A	Glen Miller, Wilkie.							

## WHEAT POOL DISTRICT 13

Cereal Variety Zone	Dist.	Sub- Dist.	Test desig- nation	Varieties	Yield bus. per acre	Days seed- ing to ripening	Plant height in inches	Straw strength	Lbs. per meas- ured bushel	Com- mercial grades	Grading remarks
<b>RAYMOND E. A. BRECHT, BAY TRAIL</b>											
3C.....	13	1	A	Thatcher.....	15.5	108	20	9.5	62	2 N.	Bl.
				Lee.....	13.0	113	20	9.5	60	2 N.	I.
				W-555.....	15.6	110	19	10.0	60	2 N.	I.
				Nugget.....	10.6	109	24	9.8	60	2 C.W.	—
				Stewart.....	10.6	116	30	8.8	63	1 C.W.	—
Necessary difference—1.8 bushels.											
<b>JOHN J. ZERR, ALLAN</b>											
2B.....	13	3	A	Thatcher.....	9.1	105	26	8.0	62	1 N.	—
				Chinook.....	8.1	109	26	6.0	64	1 N.	—
				W-555.....	9.0	110	30	4.0	62	1 N.	—
				Nugget.....	11.5	108	26	6.0	64	1 C.W.	—
				Stewart.....	13.0	110	29	4.0	65	1 C.W.	—
No significant grain yield difference between varieties.											
<b>FRANK SAFINUK, COLONSAY</b>											
2B.....	13	4	A	Thatcher.....	23.5	101	31	10.0	64	1 N.	—
				Chinook.....	21.0	103	30	9.0	65	1 N.	—
				W-555.....	23.1	102	33	8.0	63	1 N.	—
				Nugget.....	18.8	103	33	10.0	65	1 C.W.	—
				Stewart.....	18.9	103	34	7.0	66	1 C.W.	—
Necessary difference—2.6 bushels.											
<b>JOAN WHITEHEAD, GRASSWOOD</b>											
2B.....	13	5	A	Thatcher.....	33.0	—	28	—	65	1 Hard	—
				Chinook.....	28.0	—	28	—	65	1 Hard	—
				W-555.....	18.9	—	26	—	63	1 N.	—
				Nugget.....	30.7	—	29	—	64	1 C.W.	—
				Stewart.....	33.4	—	36	—	65	1 C.W.	S.E.
W-555 damaged by rodents—yields not used in zone summaries.											
<b>DEMPSEY SEDELNICK, STRUAN</b>											
2B.....	13	7	A	Thatcher.....	40.4	101	29	9.0	63	1 N.	—
				Chinook.....	31.9	100	29	9.8	63	1 N.	—
				W-555.....	37.8	102	29	9.5	64	1 N.	—
				Nugget.....	33.2	100	29	9.5	64	1 C.W.	—
				Stewart.....	31.4	104	36	9.5	61	2 C.W.	—
Necessary difference—2.1 bushels.											
<b>RITA SCHWARK, CUDWORTH</b>											
3C.....	13	9	A	Thatcher.....	25.0	—	—	—	65	2 N.	I.
				Lee.....	17.7	—	—	—	63	4 N.	F., I.
				W-555.....	23.7	—	—	—	64	3 N.	I.
				Nugget.....	18.3	—	—	—	64	4 C.W.	F., I.
				Stewart.....	25.4	—	—	—	66	2 C.W.	I.
Necessary difference—2.9 bushels.											
<b>ROBERT D. BRUNING, MUENSTER</b>											
3C.....	13	11	A	Thatcher.....	20.4	—	16	9.0	63	1 N.	—
				Lee.....	15.7	—	13	9.0	62	1 N.	—
				W-555.....	18.6	—	16	9.0	63	1 N.	—
				Nugget.....	13.7	—	13	9.0	63	1 C.W.	—
				Stewart.....	18.3	—	24	9.0	63	1 C.W.	S.E.
No significant grain yield difference between varieties.											

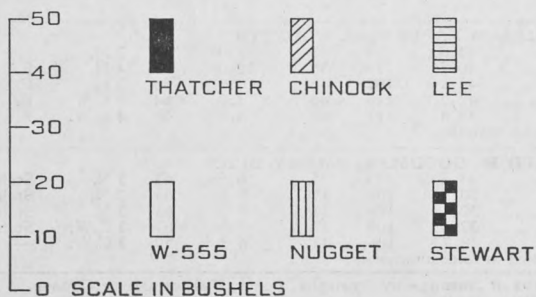
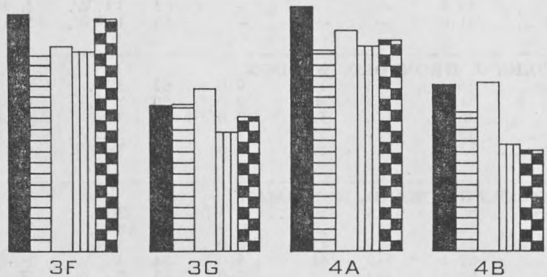
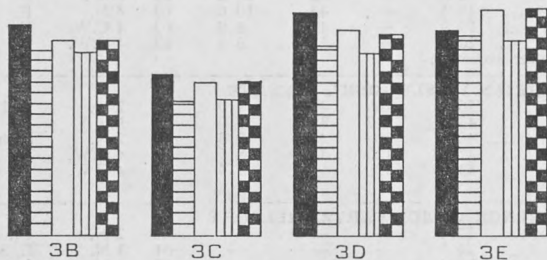
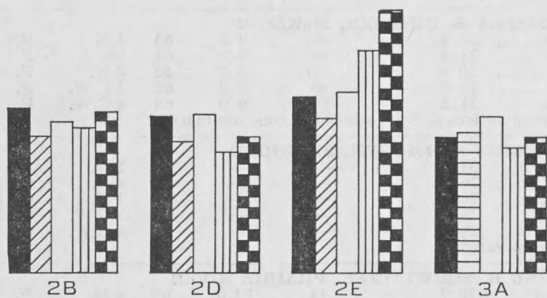
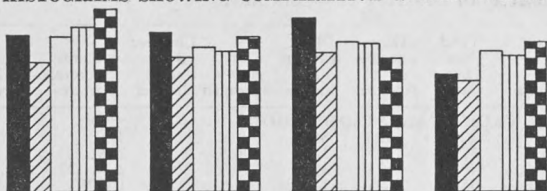
## WHEAT POOL DISTRICT 14

<b>ALLEN E. LINDGREN, KUROKI</b>											
3C.....	14	1	A	Thatcher.....	27.5	—	—	—	64	1 N.	—
				Lee.....	23.8	—	—	—	64	1 N.	—
				W-555.....	27.9	—	—	—	64	2 N.	I.
				Nugget.....	28.9	—	—	—	64	1 C.W.	—
				Stewart.....	31.7	—	—	—	65	2 C.W.	I.
No significant grain yield difference between varieties.											
<b>DONALD CLARK, SILVER PARK</b>											
4A.....	14	3	A	Thatcher.....	25.9	—	—	—	65	1 N.	—
				Lee.....	28.2	—	—	—	64	2 N.	I.
				W-555.....	30.0	—	—	—	64	2 N.	I.
				Nugget.....	21.5	—	—	—	64	2 C.W.	B.P.
				Stewart.....	17.5	—	—	—	64	1 C.W.	—
Test damaged—yields not used in zone summaries.											

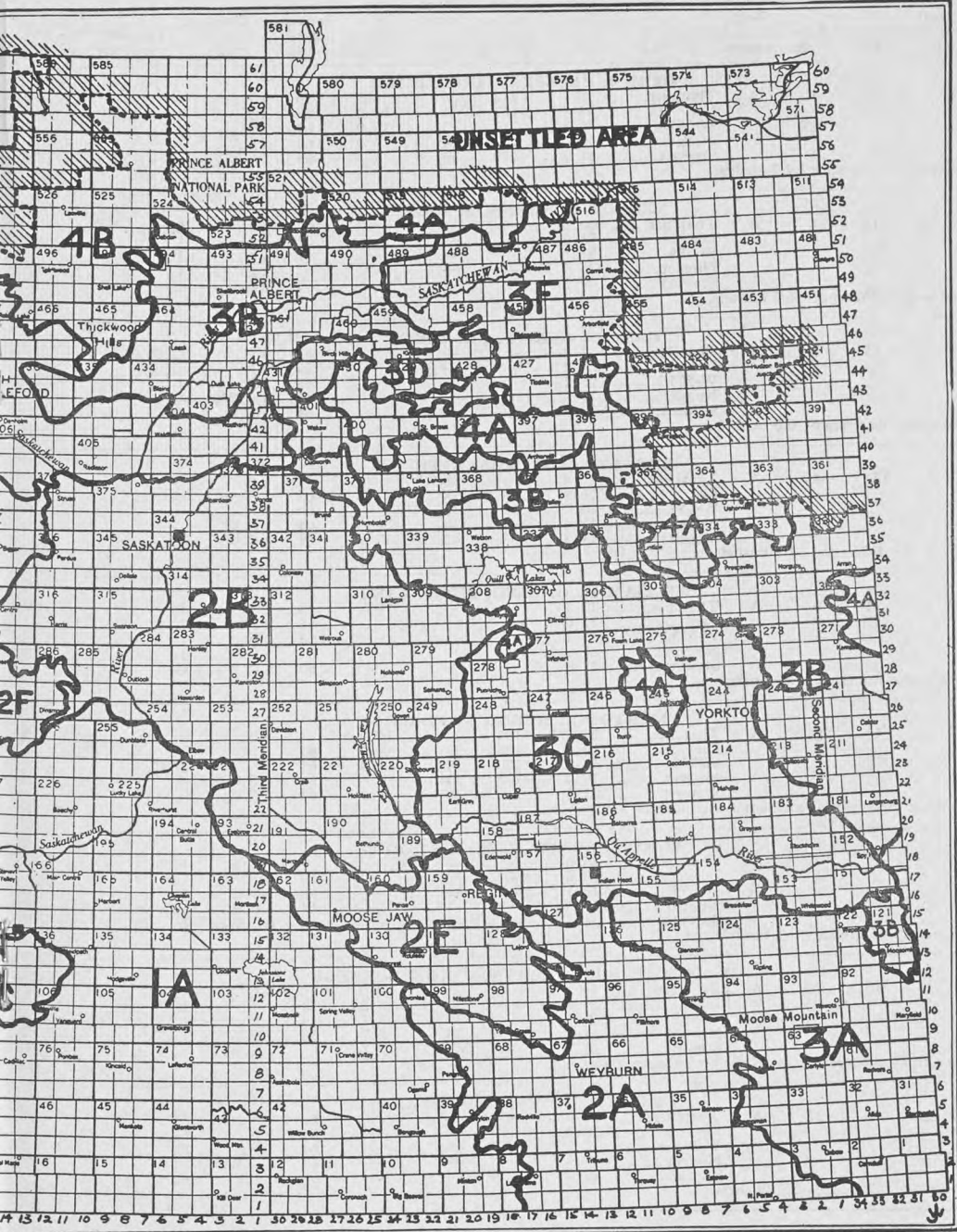
# Wheat Pool District 14—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com-mercial grades	Grading remarks
<b>R. JACK EVANS, LIGHTWOODS</b>											
4A.....	14	4	A	Thatcher.....	42.9	103	35	8.8	63	1 N.	—
				Lee.....	37.4	105	34	8.5	63	2 N.	I.
				W-555.....	40.3	105	35	8.8	62	2 N.	S.E., I.
				Nugget.....	35.4	105	37	6.5	63	1 C.W.	—
				Stewart.....	36.9	105	43	8.5	58	3 C.W.	—
Necessary difference—2.9 bushels.											
<b>ROSELLA E. DUSENER, McKAGUE</b>											
4A.....	14	4	B	Thatcher.....	26.4	—	48	8.5	63	3 N.	F.
				Lee.....	22.3	—	49	8.7	62	No. 5	F.
				W-555.....	20.8	—	47	8.7	62	4 N.	F.
				Nugget.....	19.0	—	48	8.0	63	3 C.W.	F.
				Stewart.....	21.2	—	50	9.0	64	4 C.W.	F.
No significant grain yield difference between varieties. Not included in zone summaries.											
<b>NORBERT SCHMOKER, PERIGORD</b>											
3B.....	14	5	A	Thatcher.....	31.2	—	—	—	64	2 N.	I.
				Lee.....	26.2	—	—	—	64	3 N.	G., I.
				W-555.....	26.6	—	—	—	64	3 N.	G., I.
				Nugget.....	26.6	—	—	—	64	3 C.W.	G., I.
				Stewart.....	26.6	—	—	—	64	3 C.W.	G., I.
No significant grain yield difference between varieties.											
<b>JOSEPHINE B. SCHWEITZER, PRAIRIE RIVER</b>											
3F.....	14	6	A	Thatcher.....	20.2	—	43	10.0	63	4 N.	F.
				Lee.....	13.8	—	42	10.0	58	No. 5	F.
				W-555.....	18.5	—	42	10.0	62	4 N.	F.
				Nugget.....	19.9	—	44	8.8	63	4 C.W.	F.
				Stewart.....	20.0	—	51	8.8	63	4 C.W.	F.
No significant grain yield difference between varieties.											
<b>FLORIAN W. SLUGOSKI, PEESANE</b>											
4A.....	14	7	B	Thatcher.....	56.1	109	42	9.0	65	2 N.	Stch., I.
				Lee.....	43.0	117	39	6.0	62	No. 5	F.
				W-555.....	48.7	108	44	9.3	64	2 N.	Stch., I.
				Nugget.....	47.5	120	42	3.5	64	4 C.W.	F.
				Stewart.....	53.5	120	52	3.5	65	4 C.W.	F.
Necessary difference—3.9 bushels.											
<b>LAWRENCE W. SCHWARTZ, MELFORT</b>											
3D.....	14	8	A	Thatcher.....	27.2	—	—	—	62	2 N.	Bl.
				Lee.....	24.5	—	—	—	61	3 N.	I., S.B.P.
				W-555.....	26.8	—	—	—	62	2 N.	I.
				Nugget.....	23.6	—	—	—	62	3 C.W.	I., B.P.
				Stewart.....	31.0	—	—	—	65	1 C.W.	S.B.P.
Necessary difference—2.3 bushels.											
<b>VERN J. GRONVOLD, WELDON</b>											
3D.....	14	9	A	Thatcher.....	36.8	116	29	9.0	62	3 N.	G., I.
				Lee.....	31.7	115	30	9.0	60	3 N.	G., I.
				W-555.....	36.6	116	32	9.0	61	3 N.	G., I.
				Nugget.....	35.4	121	35	7.0	62	3 C.W.	G., I.
				Stewart.....	33.9	121	43	7.0	64	3 C.W.	G., I.
Necessary difference—2.4 bushels.											
<b>MILES PRITCHARD, RUNCIMAN</b>											
3F.....	14	10	A	Thatcher.....	59.6	113	39	9.5	64	3 N.	F.
				Lee.....	50.7	111	38	9.0	61	4 N.	F.
				W-555.....	51.3	115	41	10.0	63	3 N.	F.
				Nugget.....	62.1	119	41	5.0	64	3 C.W.	F.
				Stewart.....	68.1	118	50	7.0	63	3 C.W.	F.
Necessary difference—3.5 bushels.											
<b>WILLIAM F. PERKINS, CODETTE</b>											
3F.....	14	11	A	Thatcher.....	44.8	109	42	9.0	65	2 N.	I.
				Lee.....	40.7	115	36	10.0	61	4 N.	F.
				W-555.....	43.3	107	42	10.0	64	3 N.	F.
				Nugget.....	42.2	116	46	4.0	64	3 C.W.	F.
				Stewart.....	45.6	117	60	6.0	65	4 C.W.	F.
No significant grain yield difference between varieties.											
<b>RONALD H. GOODMAN, SMOKY BURN</b>											
3F.....	14	11	B	Thatcher.....	33.8	105	35	6.5	63	3 N.	Stch.
				Lee.....	30.5	104	35	7.5	63	3 N.	Stch.
				W-555.....	30.1	106	35	8.0	63	3 N.	Stch.
				Nugget.....	32.0	105	37	5.5	63	3 C.W.	Stch.
				Stewart.....	18.7	106	42	6.8	59	3 C.W.	—
Test damaged by shattering—yields not used in zone summaries.											
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>											
3F.....	14	7	A	Clifford Price, Tisdale.							

# HISTOGRAMS SHOWING COMPARATIVE WHEAT YIELDS



Cereal Variety Zones of Saskatchewan





# WHEAT POOL DISTRICT 15

Cereal Variety Zone	Dist.	Sub- Dist.	Test design- nation	Varieties	Yield bus. per acre	Days seed- ing to ripening	Plant height in inches	Straw strength	Lbs. per meas- ured bushel	Com- mercial grades	Grading remarks
<b>CARL J. PAULSEN, BIRCH HILLS</b>											
3D.....	15	1	A	Thatcher.....	38.8	114	36	10.0	65	1 N.	—
				Lee.....	28.5	117	35	10.0	63	2 N.	I.
				W-555.....	32.5	112	35	10.0	64	2 N.	I.
				Nugget.....	26.6	129	44	7.0	64	1 C.W.	—
				Stewart.....	31.7	129	48	5.0	63	1 C.W.	—
Necessary difference—4.7 bushels.											
<b>VERNON C. SWENSON, HAGEN</b>											
3D.....	15	2	A	Thatcher.....	60.6	—	—	—	62	3 N.	Stch., I.
				Lee.....	53.6	—	—	—	62	3 N.	I.
				W-555.....	55.1	—	—	—	62	3 N.	I., S.E.
				Nugget.....	45.0	—	—	—	62	2 C.W.	I.
				Stewart.....	49.2	—	—	—	65	2 C.W.	I.
Necessary difference—6.7 bushels.											
<b>HARALD JENSON, FIR RIDGE</b>											
3B.....	15	3	A	Thatcher.....	31.4	—	—	—	62	3 N.	G., I.
				Lee.....	21.2	—	—	—	59	3 N.	G., I.
				W-555.....	28.1	—	—	—	63	2 N.	I.
				Nugget.....	15.2	—	—	—	61	3 C.W.	E.
				Stewart.....	20.3	—	—	—	61	3 C.W.	E.
Necessary difference—6.0 bushels.											
<b>KENNETH D. HARMS, HEPBURN</b>											
3G.....	15	4	A	Thatcher.....	25.4	—	38	—	65	1 N.	—
				Lee.....	21.1	—	38	—	65	1 N.	—
				W-555.....	26.8	—	37	—	64	1 N.	—
				Nugget.....	22.4	—	39	—	65	1 C.W.	—
				Stewart.....	23.3	—	42	—	61	2 C.W.	—
Necessary difference—1.7 bushels.											
<b>WILLIAM H. O. REED, SHELL LAKE</b>											
4B.....	15	6	A	Thatcher.....	32.1	—	—	—	63	2 N.	I.
				Lee.....	25.0	—	—	—	62	2 N.	I.
				W-555.....	31.2	—	—	—	63	2 N.	I.
				Nugget.....	25.0	—	—	—	61	3 C.W.	I.
				Stewart.....	21.8	—	—	—	60	4 C.W.	G.
Necessary difference—3.8 bushels.											
<b>MERTON L. HUBEL, FOXDALE</b>											
3B.....	15	8	A	Thatcher.....	27.8	104	34	10.0	64	1 N.	—
				Lee.....	19.2	105	32	9.0	65	1 N.	—
				W-555.....	30.7	100	35	10.0	64	3 N.	I., G.
				Nugget.....	19.4	103	33	9.0	64	1 C.W.	—
				Stewart.....	22.0	110	40	7.0	64	1 C.W.	—
Samples incomplete—yields not used in zone summaries.											
<b>ELMER PACZAY, PADDOCKWOOD</b>											
4A.....	15	9	A	Thatcher.....	46.0	—	—	—	61	No. 6	F.
				Lee.....	38.6	—	—	—	58	No. 6	F.
				W-555.....	40.1	—	—	—	60	No. 6	F.
				Nugget.....	37.5	—	—	—	61	6 C.W.	F.
				Stewart.....	34.3	—	—	—	62	6 C.W.	F.
Necessary difference—5.2 bushels.											
<b>ALOIS W. P. SUBCHYSHYN, JANOW CORNERS</b>											
3B.....	15	10	A	Thatcher.....	39.3	—	38	9.0	64	2 N.	I.
				Lee.....	39.1	—	38	8.2	64	2 N.	I.
				W-555.....	36.2	—	37	8.7	63	2 N.	I.
				Nugget.....	34.4	—	38	6.7	65	3 C.W.	I., Stch.
				Stewart.....	34.7	—	47	7.2	65	3 C.W.	I., Stch.
No significant grain yield difference between varieties.											
<b>LYOYD R. ROTZE, CHOICELAND</b>											
3F.....	15	11	A	Thatcher.....	47.9	—	—	—	63	3 N.	F.
				Lee.....	35.4	—	—	—	61	4 N.	F.
				W-555.....	37.5	—	—	—	62	3 N.	F.
				Nugget.....	35.5	—	—	—	62	4 C.W.	F.
				Stewart.....	45.0	—	—	—	64	5 C.W.	F.
Necessary difference—3.2 bushels.											
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>											
3B.....	15	7	A	L. Philippe Jean, Debden.							

# WHEAT POOL DISTRICT 16

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed- ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com- mercial grades	Grading remarks
<b>KENNETH W. ZALESCHUK, MAYMONT</b>											
3G.....	16	1	A	Thatcher.....	27.9	—	—	—	64	1 N.	S.E.
				Lee.....	36.7	—	—	—	64	1 N.	—
				W-555.....	35.2	—	—	—	63	1 N.	—
				Nugget.....	30.5	—	—	—	64	1 C.W.	—
				Stewart.....	27.8	—	—	—	63	1 C.W.	—
Necessary difference—5.7 bushels.											
<b>MARVIN PHILLIPS, RICHARD</b>											
3B.....	16	2	A	Thatcher.....	39.6	119	21	10.0	65	1 N.	—
				Lee.....	30.7	112	20	9.5	65	1 N.	—
				W-555.....	36.5	115	19	10.0	65	1 N.	—
				Nugget.....	32.4	111	24	7.0	64	1 C.W.	—
				Stewart.....	33.0	118	36	7.3	65	1 C.W.	—
Necessary difference—2.7 bushels.											
<b>OREST MARTINIUK, WHITKOW</b>											
3G.....	16	3	A	Thatcher.....	40.5	—	—	—	61	3 N.	F.
				Lee.....	31.5	—	—	—	59	4 N.	F.
				W-555.....	41.6	—	—	—	60	3 N.	F.
				Nugget.....	27.0	—	—	—	57	4 C.W.	—
				Stewart.....	31.2	—	—	—	57	4 C.W.	—
Samples incomplete—yields not used in zone summaries.											
<b>LEONARD A. PERRON, EDAM</b>											
3E.....	16	4	A	Thatcher.....	36.6	120	41	9.0	62	3 N.	F.
				Lee.....	34.6	120	39	8.8	61	3 N.	F., F.
				W-555.....	36.6	120	40	9.8	60	3 N.	F.
				Nugget.....	32.7	120	43	9.0	60	3 C.W.	F.
				Stewart.....	33.6	122	50	8.5	63	3 C.W.	F.
No significant grain yield difference between varieties.											
<b>KENNETH W. HARMAN, PAYNTON</b>											
3G.....	16	5	A	Thatcher.....	31.0	—	—	—	63	2 N.	I.
				Lee.....	28.0	—	—	—	63	2 N.	I.
				W-555.....	33.3	—	—	—	63	2 N.	I.
				Nugget.....	19.8	—	—	—	64	2 C.W.	I.
				Stewart.....	31.6	—	—	—	64	2 C.W.	I.
Necessary difference—5.7 bushels.											
<b>LANO R. HINDE, WASECA</b>											
3E.....	16	5	B	Thatcher.....	35.9	111	35	7.3	63	4 N.	F.
				Lee.....	39.0	111	37	8.0	64	4 N.	F.
				W-555.....	43.0	110	35	7.8	62	4 N.	F.
				Nugget.....	39.8	112	38	7.3	63	4 C.W.	F.
				Stewart.....	43.7	112	42	7.8	60	4 C.W.	F.
No significant grain yield difference between varieties.											
<b>ROBERT G. LONG, FURNESS</b>											
3E.....	16	6	A	Thatcher.....	39.4	121	37	9.8	64	1 N.	—
				Lee.....	35.1	122	34	10.0	62	1 N.	—
				W-555.....	41.2	121	35	10.0	63	1 N.	—
				Nugget.....	33.9	121	40	7.3	64	1 C.W.	—
				Stewart.....	42.5	123	42	7.3	60	2 C.W.	—
No significant grain yield difference between varieties.											
<b>DAVID J. O. RUNDBERG, SPRUCE LAKE</b>											
4B.....	16	8	A	Thatcher.....	29.0	—	38	9.5	63	4 N.	D.G., F.
				Lee.....	26.5	—	36	10.0	63	4 N.	D.G., F.
				W-555.....	33.0	—	37	10.0	62	4 N.	D.G., F.
				Nugget.....	16.0	—	36	9.5	61	4 C.W.	D.G., F.
				Stewart.....	18.0	—	44	9.8	62	4 C.W.	D.G., F.
Necessary difference—2.3 bushels.											
<b>DAVID GAMBLE, MEDSTEAD</b>											
4B.....	16	9	A	Thatcher.....	48.1	—	—	—	64	3 N.	G., F.
				Lee.....	38.2	—	—	—	64	4 N.	D.G., F.
				W-555.....	46.5	—	—	—	63	4 N.	D.G., F.
				Nugget.....	35.5	—	—	—	63	4 C.W.	D.G., F.
				Stewart.....	34.3	—	—	—	61	4 C.W.	D.G., F.
Necessary difference—6.3 bushels—Not included in zone summaries.											
<b>JOSEPH WILLOCK, JR., MILDRED</b>											
4B.....	16	10	A	Thatcher.....	29.3	110	39	10.0	61	No. 5	F.
				Lee.....	26.2	110	39	9.0	60	No. 6	F.
				W-555.....	27.2	107	36	10.0	61	No. 6	F.
				Nugget.....	16.6	114	41	7.0	61	6 C.W.	F.
				Stewart.....	15.1	116	50	5.0	62	5 C.W.	F.
Necessary difference—6.5 bushels.											
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>											
3E.....	16	7	A	Ervin K. Harland, Frenchman Butte.							

## BARLEY TESTS

A total of 111 barley tests were conducted during 1952. The varieties tested were Vantage, Nx1-11, Harlan, Titan, Montcalm and B-130. Only four of these were included in each test. Vantage and Nx1-11 were used in projects throughout the entire province, as they have shown wide adaptability. Harlan and Titan are most suited to the open prairie region (Zones 1A to 2F) and were used in the tests in that area. Montcalm and B-130 are malting varieties and were used to replace Harlan and Titan in the parkland area (Zones 3A to 4B).

### Description of Varieties

**Vantage** is a six-rowed, smooth awned variety originated at Brandon Experimental Farm from the cross (Newal X Peatland) X Plush. It is medium-late and has medium-strong straw. It is resistant to stem rust, but is susceptible to leaf rust, loose smut and covered smut. Vantage is eligible for the feed grades only.

**Nx1-11 (Husky)** is a new six-rowed, smooth awned, yellow aleurone barley developed at the University of Saskatchewan from a cross between Newal and an unnamed hybrid. Nx1-11 is resistant to stem rust but is susceptible to smuts. It is late maturing and has straw of medium strength. **JUST BEFORE THIS REPORT WAS PRINTED, Nx1-11 WAS LICENSED FOR PRODUCTION AND SALE IN CANADA, AND WAS GIVEN THE NAME "HUSKY." AT THAT TIME ITS GRADING STATUS HAD NOT BEEN ESTABLISHED.** For comparison purposes in this report Nx1-11 was limited to the seed grades.

**Harlan** is a six-rowed, rough awned variety originated by the United States Department of Agriculture as a selection from Composite Cross C.I. 5461. It is resistant to shattering and lodging and has produced good yields under irrigation conditions in Alberta. Harlan is resistant to covered and false loose smuts, stripe and bacterial blight, but is susceptible to rusts, and true loose smut. Harlan is a licensed variety and is eligible for the feed grades only.

**Titan** is a six-rowed, smooth awned variety originated at the University of Alberta from the cross Trebi X Glabron. It is early maturing and has strong straw. Titan is susceptible to stem and leaf rust, moderately resistant to covered smut, and susceptible to the races of loose smut now prevalent. It is eligible for the feed grades only.

**Montcalm** is a six-rowed, smooth awned, blue seeded variety originated at MacDonald College, Quebec, from a cross between Black Barless and a blue Manchurian selection. It is mid-late in maturity and has comparatively weak straw. Montcalm is susceptible to stem and leaf rust and to loose smut, but is moderately resistant to covered smut. It has good malting quality and is eligible for grade 1 C.W. 6-Row.

**B-130** (official title—UM-1020) is a code name adopted in the Wheat Pool testing project for a new unnamed variety. It is a six-rowed, blue seeded malting variety originated at the University of Manitoba from the crosses (O.A.C. 21 X Peatland) X O.A.C. 21. B-130 is resistant to stem and leaf rust, and moderately resistant to loose smut. It has moderately strong straw and is mid-late in maturity. The rachis and head of this variety break quite easily. **Although not licensed at the time of this report, B-130 was considered eligible for the top malting grades for purposes of grading comparisons in these tests.**

### GRAIN YIELD

Zones 1A to 2F. Generally, there was not much to choose between Vantage, Harlan and Nx1-11 but an average of all tests in this area indicates that **Vantage** outyielded the other varieties. Vantage placed first or second in every zone except the 1B and 1C group. Its best performance was in Zone 2E. **Harlan** placed second in yield on an average basis. It outyielded the other varieties in two areas, placed second in two, and third in two. Its best performance came in Zones 2B, 2D and 2F. **Nx1-11** placed third in yield on an average basis. It was high yielder in Zones 1A, 1B and 1C, and tied for first place in Zone 2A. Its best showing was in Zone 1A where it

outyielded Harlan and Titan significantly. Titan placed fourth in yield in all areas except Zone 2E.

Zones 3A to 4B. On an average basis, Nx1-11 outyielded all other varieties in this group of zones. It placed first in five zones, second in two, and third in one area. In Zones 3C and 3D, Nx1-11 outyielded all other varieties by significant differences. The second best yielder was Montcalm, which outyielded the other varieties in one zone, placed second in six, and third in one region. Its best showing was in Zone 4B, and in only two zones was it outyielded significantly by Nx1-11. Vantage ranked third on an average basis. It outyielded all other varieties in Zones 3A, 3E and 3G, but was third in the six remaining zones. Zone 3B was the only area in which the yield of Montcalm was significantly higher than that of Vantage. B-130 was outyielded by all other varieties in every zone.

TABLE No. 28.—AVERAGE YIELDS IN BUSHELS PER ACRE  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	No. of Satisfactory Tests	Vantage	N x 1-11	Harlan	Titan	Montcalm	B-130	Necessary Difference* in bushels
1A.....	13	61.8	63.9	58.5	52.8	—	—	3.4
1B and 1C....	3	44.4	45.1	44.8	39.0	—	—	N.S.
2A.....	4	64.0	64.0	60.0	50.5	—	—	7.5
2B and 2D....	12	60.5	58.8	64.9	52.1	—	—	6.4
2E.....	2	70.9	59.8	68.2	62.2	—	—	N.S.
2F.....	2	70.6	63.5	71.0	63.0	—	—	N.S.
3A.....	6	51.0	45.8	—	—	45.9	38.6	6.3
3B.....	8	54.2	63.1	—	—	61.1	43.8	5.5
3C.....	8	57.2	64.0	—	—	57.6	44.8	5.0
3D.....	4	45.6	57.8	—	—	48.0	33.8	6.5
3E and 3G....	5	61.4	59.6	—	—	59.1	56.5	N.S.
3F.....	4	44.3	52.7	—	—	51.0	40.8	11.9
4A.....	2	50.7	63.6	—	—	59.1	40.0	9.9
4B.....	4	56.4	59.3	—	—	59.6	52.0	6.3

\*Necessary Difference.—Since yielding ability of varieties cannot be measured with absolute accuracy, small differences have no significance. Unless the difference in yield of two varieties is greater than the necessary difference as shown in the tables, little confidence can be placed in the superiority of one variety over the other in that particular zone group.

N.S.—No significant grain yield difference between varieties.

Note.—There were no satisfactory tests in zone 2C.

### Past Performance and Official Recommendations

Vantage was introduced for commercial production in 1948, and since that time it has become a popular variety in Saskatchewan. It was top yielder in the open prairie zones in 1952. It was outyielded by Nx1-11 and Montcalm in the park belt in both 1951 and 1952, but outyielded Montcalm in that region in 1950. Vantage gave an average performance in the 1948 tests and placed second to Gem in 1947. Considering its record over a period of years, Vantage has averaged higher than most other varieties in yield tests, and is officially recommended for the entire 3A to 4B area with the exception of Zone 3H. It is also recommended for use in Zones 1A, 2A, 2B, 2D, 2E and 2F of the prairie region.

Nx1-11 was tested by the Wheat Pool for the second time in 1952. This variety was licensed under the name "Husky" just before this report was printed, but is still in the testing stage. It gave an outstanding performance in the 1951 tests, outyielding all other varieties in every zone of the parkland region except the 3D and 3F group. In 1952 it was again the top yielder in the park zones, and gave a satisfactory performance in the prairie region. No official recommendations will be made regarding the use of Nx1-11 until additional data has been obtained.

Harlan was used in Wheat Pool tests for the first time in 1952. It is a recommended feed variety in Alberta, where it has given good yields on irrigated land. Harlan gave good results in the prairie region of Saskatchewan in the 1952 tests, but no official recommendations will be made until further tests are carried out.

Titan was outyielded by all other varieties in the prairie zones in 1952. It was tested previously in this region by the Wheat Pool in 1947, when it averaged fifth out of six varieties, and in 1948 when it ranked last out of

**Montcalm** averaged second in yield in the parkland region in Wheat Pool tests conducted during 1951 and 1952. It placed second to Vantage in the 1950 tests, and gave fairly good results when tested earlier in 1945 and 1946, although it was outyielded by Plush in both years. Montcalm is recognized as the best malting variety for use in Saskatchewan. It is officially recommended for general use in Zones 3A, 3B, 3E and 3F, and is recommended for malting purposes only in Zones 3A, 3C, 3D, 3H, 4A and 4B.

### HISTOGRAMS SHOWING BARLEY YIELDS BY CEREAL VARIETY ZONES





TABLE No. 27.—AVERAGE NUMBER OF DAYS FROM SEEDING TO RIPENING  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Vantage	N x 1-11	Harlan	Titan	Montcalm	B-130
1A.....	102.6	101.9	98.9	96.2	—	—
1B and 1C.....	97.3	95.3	95.7	95.0	—	—
2A.....	96.0	96.7	94.7	94.3	—	—
2B and 2D.....	98.3	101.7	101.8	96.2	—	—
2E.....	100.1	104.5	100.1	94.5	—	—
2F.....	110.5	111.0	107.5	108.5	—	—
3A.....	95.5	95.3	—	—	94.0	92.8
3B.....	101.2	101.2	—	—	100.4	100.2
3C.....	104.0	106.8	—	—	105.8	101.3
3D.....	97.0	97.0	—	—	97.0	96.7
3E and 3G.....	100.5	102.0	—	—	100.5	100.0
3F.....	102.0	101.0	—	—	102.0	101.0
4A.....	93.0	97.0	—	—	92.0	90.0
4B.....	93.3	90.7	—	—	88.7	90.3

Table No. 27. Zones 1A to 2F. **Titan** ripened earlier than the other varieties on an average basis, followed by **Harlan**, **Vantage**, and **Nx1-11** in that order.

Zones 3A to 4B. **B-130** ripened earlier than the other varieties on an average basis. **Montcalm** placed second, and there was practically no difference in the average ripening period of **Vantage** and **Nx1-11**.

TABLE No. 28.—AVERAGE STRAW STRENGTH OF PLANTS  
ON THE BASIS 10 (STRONG)—0 (WEAK)  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Vantage	N x 1-11	Harlan	Titan	Montcalm	B-130
1A.....	9.3	9.1	9.3	9.2	—	—
1B and 1C.....	9.5	9.4	9.7	9.4	—	—
2A.....	7.0	6.4	5.5	5.7	—	—
2B and 2D.....	9.4	9.2	9.4	9.6	—	—
2E.....	9.1	8.9	8.9	9.1	—	—
2F.....	9.7	9.6	9.8	10.0	—	—
3A.....	8.7	8.9	—	—	7.8	8.2
3B.....	8.8	9.0	—	—	9.1	8.2
3C.....	9.6	9.5	—	—	9.0	9.3
3D.....	10.0	9.6	—	—	9.3	8.8
3E and 3G.....	8.7	8.8	—	—	8.0	7.9
3F.....	9.6	8.0	—	—	6.6	8.0
4A.....	10.0	10.0	—	—	10.0	10.0
4B.....	9.4	9.1	—	—	8.1	7.8

Table No. 28. Zones 1A to 2F. Only slight differences were noted in straw strength. On an average basis **Vantage** and **Titan** were practically equal, followed by **Harlan** and **Nx1-11**.

Zones 3A to 4B. **Vantage** had the strongest straw in these zones, followed by **Nx1-11**, **Montcalm** and **B-130** in that order.

TABLE No. 29.—AVERAGE NECK STRENGTH OF PLANTS  
BASIS 1 (STRONG), 2 (MEDIUM), 3 (WEAK)  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Vantage	N x 1-11	Harlan	Titan	Montcalm	B-130
1A.....	1.4	2.1	1.4	1.3	—	—
1B and 1C.....	1.4	2.0	1.5	1.2	—	—
2A.....	2.0	2.5	3.0	2.6	—	—
2B and 2D.....	1.6	2.8	1.9	1.4	—	—
2E.....	2.2	2.7	2.4	2.2	—	—
2F.....	1.2	1.6	1.7	1.0	—	—
3A.....	1.6	1.5	—	—	2.3	2.3
3B.....	1.6	1.8	—	—	1.7	2.0
3C.....	1.2	1.4	—	—	1.8	1.8
3D.....	1.5	2.0	—	—	2.1	2.3
3E and 3G.....	1.5	1.8	—	—	2.5	2.1
3F.....	1.2	1.8	—	—	2.0	2.0
4A.....	2.0	1.5	—	—	2.5	2.0
4B.....	1.1	1.3	—	—	1.9	2.4

Table No. 29. Zones 1A to 2F. **Titan** excelled in neck strength. It was followed by **Vantage**, **Harlan** and **Nx1-11** in that order.

Zones 3A to 4B. **Vantage** was superior in neck strength in this group of zones. It was followed by **Nx1-11**, **Montcalm** and **B-130** in that order.

**TABLE No. 30.—AVERAGE WEIGHT PER MEASURED BUSHEL  
SUMMARIZED BY CEREAL VARIETY ZONES**

Cereal Variety Zone	Vantage	N x 1-11	Harlan	Titan	Montcalm	B-130
1A.....	48.3	50.2	45.6	47.3	—	—
1B and 1C.....	48.6	50.2	46.2	46.6	—	—
2A.....	50.0	50.0	45.8	46.8	—	—
2B and 2D.....	49.5	51.6	46.3	48.2	—	—
2E.....	53.0	52.5	48.0	51.0	—	—
2F.....	51.0	51.4	48.0	50.0	—	—
3A.....	49.1	50.6	—	—	49.9	49.0
3B.....	47.5	51.0	—	—	50.1	47.9
3C.....	47.8	50.8	—	—	49.7	47.1
3D.....	45.8	49.4	—	—	48.0	45.2
3E and 3G.....	49.0	49.4	—	—	49.4	49.4
3F.....	49.4	50.4	—	—	49.4	49.6
4A.....	48.3	51.0	—	—	50.3	47.3
4B.....	48.8	52.0	—	—	50.5	48.0

Table No. 30. Zones 1A to 2F. **Nx1-11** averaged highest in bushel weight, followed by **Vantage**, **Titan** and **Harlan** in that order.

Zones 3A to 4B. **Nx1-11** consistently outweighed the other varieties in this group of zones. **Montcalm** placed second, with **Vantage** third, and **B-130** fourth.

**TABLE No. 31.—COMMERCIAL GRADES IN PERCENTAGE  
(ZONES 1A to 2F)**

Variety	1 Feed	2 Feed	3 Feed	Rejected
	%	%	%	%
Vantage.....	88.0	9.5	2.5	—
N x 1-11.....	97.6	—	2.4	—
Harlan.....	69.0	21.4	7.1	2.5
Titan.....	76.2	19.0	2.4	2.4

Table No. 31. All varieties used in this area were limited to the feed class. **Nx1-11** graded better than the other varieties with 97.6 percent of the samples in the 1 Feed category. **Vantage** placed second, **Titan** third, and **Harlan** fourth.

**TABLE No. 32.—COMMERCIAL GRADES IN PERCENTAGE  
(ZONES 3A to 4B)**

Variety	1 C.W. 6R	2 C.W. 6R	3 C.W. 6R	1 Feed	2 Feed	3 Feed
	%	%	%	%	%	%
Vantage.....	—	—	—	83.0	17.0	—
N x 1-11.....	—	—	—	97.8	2.2	—
Montcalm.....	23.4	46.7	21.3	6.4	2.2	—
B-130.....	14.9	38.3	25.5	4.2	14.9	2.2

Table No. 32. Both **Montcalm** and **B-130** are malting varieties and are eligible for higher grades than **Vantage** and **Nx1-11**. The commercial grades of the four varieties in this area, therefore, are not comparable. However, **Montcalm** graded better than **B-130**. Of the feed varieties, **Nx1-11** produced higher grades than **Vantage**.

## SUMMARIZATION ACCORDING TO CEREAL VARIETY ZONES

**TABLE No. 33.—SUMMARIZED RESULTS FOR ZONE 1A  
(13 satisfactory tests)**

	Vantage	N x 1-11	Harlan	Titan
Yield in bushels per acre.....	61.8	63.9	58.5	52.8
Days from seeding to ripening.....	102.6	101.9	98.9	96.2
Height of plants in inches.....	28.8	29.3	28.1	26.7
Straw strength (maximum of 10).....	9.3	9.1	9.3	9.2
Neck strength—(basis: 1-strong; 2-medium; 3-weak).....	1.4	2.1	1.4	1.3
Bushel weight in pounds.....	48.3	50.2	45.6	47.3
Commercial grades in percentage:				
1 Feed.....	87.5	93.8	56.3	68.8
2 Feed.....	6.3	6.2	31.2	18.7
3 Feed.....	6.2	—	6.3	6.3
Rejected.....	—	—	6.2	6.2

Necessary difference—3.4 bushels.

Table No. 33. Nx1-11 was high in yield, bushel weight and grades. It was slightly weaker in straw and neck than the other varieties and was mid-late in maturity.

Vantage was second in yield and gave a generally satisfactory performance. It was later than the other varieties.

Harlan placed third in yield. It was low in bushel weight and grading ability, but ripened relatively early.

Titan was outyielded significantly by all other varieties. It ripened early and had good neck strength.

TABLE No. 34.—SUMMARIZED RESULTS FOR ZONE GROUP 1B AND 1C  
(3 satisfactory tests)

	Vantage	N x 1-11	Harlan	Titan
Yield in bushels per acre.....	44.4	45.1	44.8	39.0
Days from seeding to ripening.....	97.3	95.3	95.7	95.0
Height of plants in inches.....	26.0	23.0	25.3	24.3
Straw strength (maximum of 10).....	9.5	9.4	9.7	9.4
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.4	2.0	1.5	1.2
Bushel weight in pounds.....	48.6	50.2	46.2	46.6
Commercial grades in percentage: 1 Feed.....	60.0	100.0	80.0	60.0
2 Feed.....	40.0	—	—	40.0
3 Feed.....	—	—	20.0	—

No significant grain yield difference between varieties.

Table No. 34. Nx1-11 was high in yield although the yield differences in this zone were not significant. It had high bushel weight and graded well, but was mid-weak in neck strength.

Harlan placed second in yield. It was somewhat lower in bushel weight than Nx1-11 and Vantage.

Vantage gave a satisfactory performance, although it ripened slightly later than the other varieties.

Titan placed fourth in yield but the differences were not significant and should not be considered an important factor. Titan ripened early and excelled in neck strength.

TABLE No. 35.—SUMMARIZED RESULTS FOR ZONE 2A  
(4 satisfactory tests)

	Vantage	N x 1-11	Harlan	Titan
Yield in bushels per acre.....	64.0	64.0	60.0	50.5
Days from seeding to ripening.....	96.0	96.7	94.7	94.3
Height of plants in inches.....	42.0	41.7	39.7	40.0
Straw strength (maximum of 10).....	7.0	6.4	5.5	5.7
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	2.0	2.5	3.0	2.6
Bushel weight in pounds.....	50.0	50.0	45.8	46.8
Commercial grades in percentage: 1 Feed.....	100.0	100.0	75.0	75.0
2 Feed.....	—	—	25.0	25.0

Necessary difference—7.5 bushels.

Table No. 35. Nx1-11 and Vantage were equal in yielding ability, bushel weight and grades. Vantage had a slight advantage over Nx1-11 in earliness, height, straw strength and neck strength, but all of these differences were of a minor nature. Both varieties outyielded Titan significantly.

Harlan placed third in yield. It was low in bushel weight, and was inferior in straw strength and neck strength.

Titan was low in yield but ripened early.

**TABLE No. 36.—SUMMARIZED RESULTS FOR ZONE GROUP 2B AND 2D**  
(12 satisfactory tests)

	Vantage	N x 1-11	Harlan	Titan
Yield in bushels per acre.....	60.5	58.8	64.9	52.1
Days from seeding to ripening.....	98.3	101.7	101.8	96.2
Height of plants in inches.....	29.4	29.9	27.3	27.0
Straw strength (maximum of 10).....	9.4	9.2	9.4	9.6
Neck strength—(basis: 1-strong; 2-medium; 3-weak).....	1.6	2.8	1.9	1.4
Bushel weight in pounds.....	49.5	51.6	46.3	48.2
Commercial grades in percentage: 1 Feed.....	91.7	100.0	66.7	83.3
2 Feed.....	8.3	—	25.0	16.7
3 Feed.....	—	—	8.3	—

Necessary difference—6.4 bushels.

Table No. 36. **Harlan** was high in yield but exceeded only **Titan** significantly. It was low in bushel weight and grades, and ripened late.

**Vantage** was second in yield, and proved satisfactory in other characteristics.

**Nx1-11** placed third in yield, but excelled in bushel weight and grades. It ripened relatively late, and was weak in neck strength.

**Titan** was significantly outyielded by all other varieties. It ripened early, and excelled in straw strength and neck strength.



Art Jones of Govenlock harvesting his barley variety test.

**TABLE No. 37.—SUMMARIZED RESULTS FOR ZONE 2E**  
(2 satisfactory tests)

	Vantage	N x 1-11	Harlan	Titan
Yield in bushels per acre.....	70.9	59.8	68.2	62.2
Days from seeding to ripening.....	100.1	104.5	100.1	94.5
Height of plants in inches.....	36.0	36.0	36.0	35.0
Straw strength (maximum of 10).....	9.1	8.9	8.9	9.1
Neck strength—(basis: 1-strong; 2-medium; 3-weak).....	2.2	2.7	2.4	2.2
Bushel weight in pounds.....	53.0	52.5	48.0	51.0
Commercial grades in percentage: 1 Feed.....	100.0	100.0	100.0	100.0

No significant grain yield difference between varieties.

Table No. 37. As only two tests in this zone provided satisfactory results, the amount of data obtained is limited. Under the circumstances, the yield differences shown above should not be considered of major significance. On the basis of the information available, however, **Vantage** outyielded the other varieties. It was high in bushel weight.

**Harlan** was low in bushel weight but gave satisfactory results otherwise.

**Nx1-11** ripened late and was slightly weaker in neck strength than the other varieties.

**Titan** ripened early. It was satisfactory in other characteristics.

**TABLE No. 38.—SUMMARIZED RESULTS FOR ZONE 2F**  
(2 satisfactory tests)

	Vantage	N x 1-11	Harlan	Titan
Yield in bushels per acre.....	70.6	63.5	71.0	63.0
Days from seeding to ripening.....	110.5	111.0	107.5	108.5
Height of plants in inches.....	32.5	32.5	30.5	31.5
Straw strength (maximum of 10).....	9.7	9.6	9.8	10.0
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.2	1.6	1.7	1.0
Bushel weight in pounds.....	51.0	51.4	48.0	50.0
Commercial grades in percentage: 1 Feed.....	100.0	100.0	100.0	100.0

No significant grain yield difference between varieties.

Table No. 38. The information in this table is based on the results of only two tests, and the differences in yield should not be considered of a significant nature.

On the basis of the data available, **Harlan** and **Vantage** were practically equal in yield. **Harlan** ripened early but was low in bushel weight and slightly inferior to the other varieties in neck strength. **Vantage** had good neck strength and bushel weight. It ripened relatively late.

**Nx1-11** and **Titan** were practically equal in yield. **Nx1-11** was high in bushel weight, but ripened later than the other varieties.

**Titan** had strong straw and neck, and ripened relatively early.

**TABLE No. 39.—SUMMARIZED RESULTS FOR ZONE 3A**  
(6 satisfactory tests)

	Vantage	N x 1-11	Montcalm	B-130
Yield in bushels per acre.....	51.0	45.8	45.9	38.6
Days from seeding to ripening.....	95.5	95.3	94.0	92.8
Height of plants in inches.....	36.8	38.3	40.8	39.3
Straw strength (maximum of 10).....	8.7	8.9	7.8	8.2
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.6	1.5	2.3	2.3
Bushel weight in pounds.....	49.1	50.6	49.9	49.0
Commercial grades in percentage: 1 C.W. 6R.....	—	—	42.9	14.3
2 C.W. 6R.....	—	—	42.9	57.1
3 C.W. 6R.....	—	—	14.2	28.6
1 Feed.....	85.7	100.0	—	—
2 Feed.....	14.3	—	—	—

Necessary difference—6.3 bushels.

Table No. 39. **Vantage** was high in yield, and gave a generally satisfactory performance. It was slightly later in ripening than the other varieties.

**Montcalm** and **Nx1-11** were practically equal in yield, both outyielding **B-130** significantly. **Montcalm** was taller and ripened earlier than **Nx1-11**, but had weak straw and neck. **Nx1-11** was high in bushel weight.

**B-130** was low in yield and bushel weight. It ripened early but showed weakness in neck strength.

**TABLE No. 40.—SUMMARIZED RESULTS FOR ZONE 3B**  
(8 satisfactory tests)

	Vantage	N x 1-11	Montcalm	B-130
Yield in bushels per acre.....	54.2	63.1	61.1	43.8
Days from seeding to ripening.....	101.2	101.2	100.4	100.2
Height of plants in inches.....	31.3	31.7	34.2	30.2
Straw strength (maximum of 10).....	8.8	9.0	9.1	8.2
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.6	1.8	1.7	2.0
Bushel weight in pounds.....	47.5	51.0	50.1	47.9
Commercial grades in percentage: 1 C.W. 6R.....	—	—	25.0	12.5
2 C.W. 6R.....	—	—	50.0	50.0
3 C.W. 6R.....	—	—	25.0	25.0
1 Feed.....	75.0	100.0	—	—
2 Feed.....	25.0	—	—	12.5

Necessary difference—5.5 bushels.



Table No. 40. Nx1-11 outyielded the other varieties, exceeding Vantage and B-130 by a significant margin. Nx1-11 excelled in bushel weight and was satisfactory in other characteristics.

Montcalm placed second in yield, exceeding both Vantage and B-130 significantly. It was superior to B-130, the only other malting variety in the test, in practically all characteristics.

Vantage placed third in yield and was somewhat inferior to Nx1-11 in bushel weight.

B-130 again was outyielded significantly by all other varieties, and was inferior in straw strength and neck strength.

TABLE No. 41.—SUMMARIZED RESULTS FOR ZONE 3C  
(8 satisfactory tests)

	Vantage	N x 1-11	Montcalm	B-130
Yield in bushels per acre.....	57.2	64.0	57.6	44.8
Days from seeding to ripening.....	104.0	106.8	105.8	101.3
Height of plants in inches.....	31.3	31.9	34.4	33.1
Straw strength (maximum of 10).....	9.6	9.5	9.0	9.3
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.2	1.4	1.8	1.8
Bushel weight in pounds.....	47.8	50.8	49.7	47.1
Commercial grades in percentage:				
1 C.W. 6R.....	—	—	30.0	10.0
2 C.W. 6R.....	—	—	60.0	40.0
3 C.W. 6R.....	—	—	—	20.0
1 Feed.....	90.0	100.0	10.0	—
2 Feed.....	10.0	—	—	30.0

Necessary difference—5.0 bushels.

Table No. 41. Nx1-11 outyielded all other varieties significantly. It was high in bushel weight but ripened relatively late.

Montcalm and Vantage were practically equal in yield, both exceeding B-130 significantly. Montcalm was higher than Vantage in bushel weight and grading ability, but ripened later and had weaker straw and neck.

B-130 was significantly outyielded by all other varieties, and was low in bushel weight. It ripened comparatively early.

TABLE No. 42.—SUMMARIZED RESULTS FOR ZONE 3D  
(4 satisfactory tests)

	Vantage	N x 1-11	Montcalm	B-130
Yield in bushels per acre.....	45.6	57.8	48.0	33.8
Days from seeding to ripening.....	97.0	97.0	97.0	96.7
Height of plants in inches.....	24.4	26.2	28.0	26.0
Straw strength (maximum of 10).....	10.0	9.6	9.3	8.8
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.5	2.0	2.1	2.3
Bushel weight in pounds.....	45.8	49.4	48.0	45.2
Commercial grades in percentage:				
2 C.W. 6R.....	—	—	40.0	20.0
3 C.W. 6R.....	—	—	60.0	40.0
1 Feed.....	60.0	100.0	—	—
2 Feed.....	40.0	—	—	20.0
3 Feed.....	—	—	—	20.0

Necessary difference—6.5 bushels.

Table No. 42. Nx1-11 outyielded all other varieties significantly. It was high in bushel weight and graded better than Vantage, the other feed variety. It was slightly weaker than Vantage in straw strength and neck strength.

Montcalm placed second in yield, outyielding B-130 significantly. It gave a generally good performance, although it proved inferior to Vantage in straw strength and neck strength.

Vantage was third in yield. It excelled in strength of straw and neck, but was lower in bushel weight than Nx1-11 and Montcalm.

B-130 was outyielded significantly by all other varieties. It proved inferior in straw strength, neck strength and bushel weight.

**TABLE No. 43.—SUMMARIZED RESULTS FOR ZONE GROUP 3E AND 3G**  
(5 satisfactory tests)

	Vantage	N x 1-11	Montcalm	B-130
Yield in bushels per acre.....	61.4	59.6	59.1	56.5
Days from seeding to ripening.....	100.5	102.0	100.5	100.0
Height of plants in inches.....	47.3	46.6	49.3	48.6
Straw strength (maximum of 10).....	8.7	8.8	8.0	7.9
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.5	1.8	2.5	2.1
Bushel weight in pounds.....	49.0	49.4	49.4	49.4
Commercial grades in percentage: 1 C.W. 6R.....	—	—	40.0	40.0
2 C.W. 6R.....	—	—	20.0	20.0
3 C.W. 6R.....	—	—	20.0	20.0
1 Feed.....	80.0	80.0	—	—
2 Feed.....	20.0	20.0	20.0	20.0

No significant grain yield difference between varieties.

Table No. 43. Differences in yield were not significant in this zone. The fact that **Vantage** produced the highest yield should not be considered of major importance, therefore, but its superior neck strength, good straw strength, and other favorable features are worthy of consideration.

**Nx1-11** placed second in yield, and was satisfactory in straw strength and neck strength. It was slightly later in ripening than the other varieties.

**Montcalm** was third in yield, but was inferior in neck strength and showed some weakness in straw.

**B-130** was outyielded by all other varieties. It was relatively weak in straw and neck, but ripened early.

**TABLE No. 44.—SUMMARIZED RESULTS FOR ZONE 3F**  
(4 satisfactory tests)

	Vantage	N x 1-11	Montcalm	B-130
Yield in bushels per acre.....	44.3	52.7	51.0	40.8
Days from seeding to ripening.....	102.0	101.0	102.0	101.0
Height of plants in inches.....	46.0	42.0	44.0	47.0
Straw strength (maximum of 10).....	9.6	8.0	6.6	8.0
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.2	1.8	2.0	2.0
Bushel weight in pounds.....	49.4	50.4	49.4	49.6
Commercial grades in percentage: 1 C.W. 6R.....	—	—	20.0	40.0
2 C.W. 6R.....	—	—	60.0	60.0
3 C.W. 6R.....	—	—	20.0	—
1 Feed.....	100.0	100.0	—	—

Necessary difference—11.9 bushels.

Table No. 44. **Nx1-11** outyielded the other varieties, but as the difference necessary for significance is 11.9 bushels per acre, its yield advantage is significant only in the case of B-130. **Nx1-11** was high in bushel weight, but was shorter in straw than the other varieties.

**Montcalm** placed second in yield. It was inferior in straw strength and neck strength.

**Vantage** was third in yield, but excelled in straw strength and neck strength.

**B-130** was outyielded by the other varieties. It was slightly higher than **Montcalm** in bushel weight and grades, and ripened earlier.

**TABLE No. 45.—SUMMARIZED RESULTS FOR ZONE 4A**  
(2 satisfactory tests)

	Vantage	N x 1-11	Montcalm	B-130
Yield in bushels per acre.....	50.7	63.6	59.1	40.0
Days from seeding to ripening.....	93.0	97.0	92.0	90.0
Height of plants in inches.....	31.0	30.0	30.0	31.0
Straw strength (maximum of 10).....	10.0	10.0	10.0	10.0
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	2.0	1.5	2.5	2.0
Bushel weight in pounds.....	48.3	51.0	50.3	47.3
Commercial grades in percentage: 2 C.W. 6R.....	—	—	33.3	—
3 C.W. 6R.....	—	—	—	33.3
1 Feed.....	100.0	100.0	66.7	66.7

Necessary difference—9.9 bushels.

Table No. 45. **Nx1-11** was high in yield, outyielding **Vantage** and **B-130** significantly. It excelled in neck strength and bushel weight, but was somewhat late in ripening.

**Montcalm** placed second in yield and bushel weight. It graded slightly better than B-130, but was later in ripening and weaker in neck strength than that variety.

**Vantage** placed third in yield, exceeding B-130 significantly. Compared with Nx1-11, the other feed variety in the tests, it ripened earlier but was inferior in neck strength and lower in bushel weight.

**B-130** was significantly outyielded by all other varieties, and was low in bushel weight. It ripened early.

TABLE No. 46.—SUMMARIZED RESULTS FOR ZONE 4B  
(4 satisfactory tests)

	Vantage	N x 1-11	Montcalm	B-130
Yield in bushels per acre.....	56.4	59.3	59.6	52.0
Days from seeding to ripening.....	93.3	90.7	88.7	90.3
Height of plants in inches.....	40.3	40.0	45.0	44.7
Straw strength (maximum of 10).....	9.4	9.1	8.1	7.8
Neck strength—(basis: 1-strong; 2-medium; 3-weak).....	1.1	1.3	1.9	2.4
Bushel weight in pounds.....	48.8	52.0	50.5	48.0
Commercial grades in percentage: 2 C.W. 6R.....	—	—	75.0	25.0
3 C.W. 6R.....	—	—	25.0	50.0
1 Feed.....	75.0	100.0	—	—
2 Feed.....	25.0	—	—	25.0

Necessary difference—6.3 bushels.

Table No. 46. **Montcalm** outyielded the other varieties, the difference being significant in the case of B-130. It had good bushel weight and grades, and ripened early. It was weaker than the feed varieties in straw strength and neck strength.

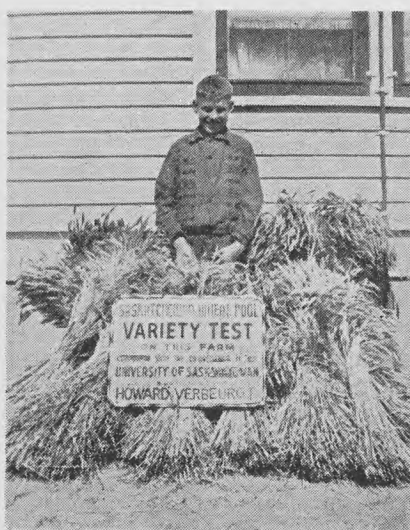
**Nx1-11** compared favorably with **Montcalm** in yield. It outyielded B-130 significantly, and excelled in bushel weight. It ripened earlier than **Vantage**, and proved satisfactory in straw strength and neck strength.

**Vantage** was third in yield. It was superior in straw strength and neck strength, but ripened later than the other varieties.

**B-130** was outyielded by all other varieties, and was inferior in straw strength and neck strength. It was low in bushel weight, and failed to equal **Montcalm** in grading ability.



Glen and Bud Bachelder of Mullingar and the sheaves from their barley variety test.



Howard Verbeurgt of Ceylon and the sheaves from his wheat variety test.

TABLE No. 47

## Individual Summarized Results of All Tests—Barley

## WHEAT POOL DISTRICT 1

Cereal Variety Zone	Sub-Dist.	Test Designation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial Grades	Grading Remarks
<b>BETTY C. CAVEN, GAINSBOROUGH</b>											
3A.....	1	1	B	Vantage.....	9.7	—	—	—	47	1 Feed	—
				N x 1-11.....	10.9	—	—	—	47	1 Feed	—
				Montcalm.....	5.4	—	—	—	48	2 C.W. 6R	—
				B-130.....	5.9	—	—	—	47	3 C.W. 6R	—
Necessary difference—2.6 bushels.											
<b>GARTH A. WINTERINGHAM, OXBOW</b>											
3A.....	1	3	B	Vantage.....	51.8	86	30	9.0	2.0	50	1 Feed —
				N x 1-11.....	47.4	83	32	9.0	2.0	51	1 Feed —
				Montcalm.....	49.0	83	35	9.0	2.0	51	1 C.W. 6R —
				B-130.....	36.6	83	29	9.0	2.0	50	1 C.W. 6R —
No significant grain yield difference between varieties.											
<b>LOUIS GLOWATSKI, MACOUN</b>											
2A.....	1	5	B	Vantage.....	99.5	99	63	10.0	1.0	51	1 Feed —
				N x 1-11.....	102.8	101	63	9.0	2.0	49	1 Feed —
				Harlan.....	85.3	92	58	6.6	3.0	45	2 Feed —
				Titan.....	86.9	97	60	8.4	2.2	44	2 Feed —
Necessary difference—9.2 bushels.											
<b>CORRINNE J. SWENSON, MIDALE</b>											
2A.....	1	6	B	Vantage.....	82.5	83	36	9.6	3.0	48	1 Feed —
				N x 1-11.....	82.0	84	35	9.4	3.0	50	1 Feed —
				Harlan.....	78.4	85	34	9.0	3.0	46	1 Feed —
				Titan.....	57.8	81	33	8.8	3.0	46	1 Feed —
Necessary difference—12.7 bushels.											
<b>WALLACE J. BLOCK, OUNGRE</b>											
2A.....	1	7	B	Vantage.....	15.0	106	27	—	—	50	1 Feed —
				N x 1-11.....	15.5	105	27	—	—	48	1 Feed —
				Harlan.....	18.5	107	27	—	—	46	1 Feed —
				Titan.....	14.1	105	27	—	—	48	1 Feed —
No significant grain yield difference between varieties.											
<b>RALPH AND EDNA COLTART, WEYBURN</b>											
2A.....	1	8	B	Vantage.....	58.8	—	—	—	—	51	1 Feed —
				N x 1-11.....	55.7	—	—	—	—	53	1 Feed —
				Harlan.....	57.6	—	—	—	—	46	1 Feed —
				Titan.....	43.0	—	—	—	—	49	1 Feed —
No significant grain yield difference between varieties.											
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>											
2A.....	1	9	B	Louis Richaud, Jr., Forget.	—	—	—	—	—	—	—

## WHEAT POOL DISTRICT 2

<b>HARRY C. JENSEN, HARDY</b>											
1A.....	2	2	C	Vantage.....	72.5	—	—	—	—	51	1 Feed —
				N x 1-11.....	78.9	—	—	—	—	52	1 Feed —
				Harlan.....	65.9	—	—	—	—	47	1 Feed —
				Titan.....	68.7	—	—	—	—	49	1 Feed —
No significant grain yield difference between varieties.											
<b>ARTHUR VOLKE, BIG BEAVER</b>											
1A.....	2	3	B	Vantage.....	39.1	104	22	9.2	1.0	51	1 Feed —
				N x 1-11.....	42.8	107	21	9.0	2.4	51	1 Feed —
				Harlan.....	36.2	101	22	9.0	2.4	45	2 Feed —
				Titan.....	39.5	99	22	8.2	2.2	49	1 Feed —
Necessary difference—3.4 bushels.											
<b>STEVE J. DAVEY, LONESOME BUTTE</b>											
1A.....	2	5	B	Vantage.....	21.9	114	24	9.0	2.0	35	3 Feed —
				N x 1-11.....	27.2	114	24	9.0	2.0	39	3 Feed —
				Harlan.....	9.9	101	17	10.0	2.0	40	3 Feed —
				Titan.....	15.9	101	17	10.0	2.0	42	3 Feed —
Test damaged by spring frost—yields not used in zone summaries.											
<b>PATSY CONNAUGHTY, STONEHENGE</b>											
1A.....	2	7	B	Vantage.....	85.0	—	—	—	—	51	1 Feed —
				N x 1-11.....	81.7	—	—	—	—	51	1 Feed —
				Harlan.....	67.6	—	—	—	—	46	1 Feed —
				Titan.....	67.2	—	—	—	—	47	1 Feed —
Necessary difference—9.5 bushels.											

# Wheat Pool District 2—Continued

Cereal Variety Zone	Sub-Dist.	Test Designation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial Grades	Grading Remarks
<b>HENRY A. HOLT, BENGOUGH</b>											
1A.....	2	9	B	Vantage.....	57.3	102	28	9.0	2.0	52	1 Feed —
				N x 1-11.....	60.3	100	30	10.0	3.0	52	1 Feed —
				Harlan.....	58.0	94	28	8.0	2.0	49	1 Feed —
				Titan.....	56.2	83	26	9.0	1.0	52	1 Feed —

No significant grain yield difference between varieties.

# WHEAT POOL DISTRICT 3

<b>GEORGE W. BRACKENBURY, DIVIDE</b>											
1C.....	3	4	B	Vantage.....	48.1	98	28	10.0	—	51	1 Feed —
				N x 1-11.....	52.9	97	24	10.0	—	52	1 Feed —
				Harlan.....	48.9	95	26	10.0	—	47	1 Feed —
				Titan.....	42.9	96	24	9.0	—	47	1 Feed —

No significant grain yield difference between varieties.

<b>EILIV H. ANDERSON, ROBSART</b>											
1C.....	3	5	B	Vantage.....	34.1	—	—	—	—	45	2 Feed —
				N x 1-11.....	31.5	—	—	—	—	48	1 Feed —
				Harlan.....	28.7	—	—	—	—	42	3 Feed —
				Titan.....	27.1	—	—	—	—	43	2 Feed —

No significant grain yield difference between varieties.

<b>ARTHUR JONES, GOVENLOCK</b>											
1C.....	3	5	C	Vantage.....	51.9	—	—	—	—	46	1 Feed —
				N x 1-11.....	47.1	—	—	—	—	46	1 Feed —
				Harlan.....	51.4	—	—	—	—	43	2 Feed —
				Titan.....	44.2	—	—	—	—	46	1 Feed —

No significant grain yield difference between varieties—Test results not included in zone summaries.

<b>RUSSELL G. WHYTE, SCOTSGUARD</b>											
1A.....	3	8	B	Vantage.....	29.4	—	—	—	—	50	1 Feed —
				N x 1-11.....	34.9	—	—	—	—	52	1 Feed —
				Harlan.....	27.2	—	—	—	—	46	1 Feed —
				Titan.....	21.8	—	—	—	—	49	1 Feed —

Necessary difference—6.8 bushels—Test results not included in zone summaries.

## Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes

1A.....	3	2	A	Jack A. Davidson, Ponteix.
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# WHEAT POOL DISTRICT 4

<b>WALTER H. NISBET, SUCCESS</b>											
1A.....	4	3	B	Vantage.....	52.4	93	28	10.0	1.0	47	1 Feed —
				N x 1-11.....	69.0	94	30	10.0	1.0	49	1 Feed —
				Harlan.....	41.5	93	28	10.0	1.0	45	2 Feed S.E.
				Titan.....	42.8	92	24	10.0	1.0	46	1 Feed S.E.

Samples incomplete—yields not used in zone summaries.

<b>RONALD V. REIMER, LEINAN</b>											
1A.....	4	3	C	Vantage.....	74.9	—	28	9.4	1.4	50	1 Feed —
				N x 1-11.....	74.0	—	27	7.8	1.4	52	1 Feed —
				Harlan.....	62.1	—	28	10.0	1.2	48	1 Feed —
				Titan.....	67.3	—	28	10.0	1.2	50	1 Feed —

Necessary difference—5.1 bushels.

<b>HOWARD M. HASKELL, HORSHAM</b>											
1B.....	4	7	B	Vantage.....	75.3	97	32	9.4	1.8	50	1 Feed —
				N x 1-11.....	65.8	97	32	9.2	3.0	52	1 Feed —
				Harlan.....	64.9	95	32	9.0	2.0	47	1 Feed —
				Titan.....	—	92	31	9.2	1.4	48	1 Feed —

Yields of Titan discarded due to excessive shattering—yields not used in zone summaries.

<b>IVIN MARTIN, SCEPTRE</b>											
1A.....	4	9	B	Vantage.....	45.8	—	—	—	—	52	1 Feed —
				N x 1-11.....	29.3	—	—	—	—	52	1 Feed —
				Harlan.....	60.9	—	—	—	—	49	1 Feed —
				Titan.....	52.0	—	—	—	—	50	1 Feed —

N x 1-11 damaged by shattering—yields not used in zone summaries.

## Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes

1B.....	4	2	B	Norman Anhorn, Hatton.
1A.....	4	4	B	Zene J. Downey, Gull Lake.



## WHEAT POOL DISTRICT 5

Cereal Variety	Dist.	Sub-Dist.	Test Designation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial Grades	Grading Remarks
<b>EDWARD J. BOWLER, PALMER</b>												
1A.....	5	1	B	Vantage.....	57.3	101	30	10.0	1.0	44	2 Feed	—
				N x 1-11.....	61.2	103	32	10.0	2.0	49	1 Feed	—
				Harlan.....	57.2	97	31	9.8	1.0	44	2 Feed	—
				Titan.....	49.2	96	27	10.0	1.0	45	2 Feed	—
Necessary difference—4.0 bushels.												
<b>GERALD E. JACOB, ST. BOSWELLS</b>												
1A.....	5	2	B	Vantage.....	54.3	93	37	8.8	1.2	51	1 Feed	—
				N x 1-11.....	61.2	94	39	9.4	1.6	52	1 Feed	—
				Harlan.....	62.7	92	37	8.2	1.0	46	1 Feed	—
				Titan.....	48.7	88	35	9.0	1.2	50	1 Feed	—
No significant grain yield difference between varieties.												
<b>DALE FOWKE, NEVILLE</b>												
1A.....	5	3	B	Vantage.....	55.4	—	—	—	—	46	1 Feed	—
				N x 1-11.....	59.1	—	—	—	—	52	1 Feed	—
				Harlan.....	62.7	—	—	—	—	46	1 Feed	—
				Titan.....	51.5	—	—	—	—	46	1 Feed	—
Necessary difference—3.3 bushels.												
<b>LEONA B. VEER, WALDECK</b>												
1A.....	5	4	B	Vantage.....	73.1	102	36	8.6	1.2	49	1 Feed	—
				N x 1-11.....	71.0	101	38	8.4	3.0	50	1 Feed	—
				Harlan.....	73.1	101	36	8.4	1.0	46	1 Feed	S.E.
				Titan.....	56.5	94	35	10.0	1.0	46	1 Feed	S.E.
Necessary difference—7.8 bushels.												
<b>CYRIL McINTYRE, BOHARM</b>												
2E.....	5	7	B	Vantage.....	55.7	99	36	9.4	1.4	52	1 Feed	—
				N x 1-11.....	48.8	101	36	9.4	2.4	52	1 Feed	—
				Harlan.....	52.6	95	36	8.8	1.8	48	1 Feed	—
				Titan.....	45.5	93	34	9.4	1.4	50	1 Feed	—
No significant grain yield difference between varieties.												
<b>LILLIAN M. &amp; ARTHUR L. NASH, EYEBROW</b>												
2B.....	5	8	B	Vantage.....	98.3	110	39	8.6	1.8	51	1 Feed	—
				N x 1-11.....	51.9	117	43	7.8	2.0	53	1 Feed	—
				Harlan.....	98.6	117	34	9.4	1.4	47	1 Feed	—
				Titan.....	77.5	99	37	9.6	1.0	49	1 Feed	—
Necessary difference—12.5 bushels.												
<b>MELVIN F. BRADFORD, CENTRAL BUTTE</b>												
1A.....	5	9	B	Vantage.....	45.7	112	27	10.0	1.0	49	1 Feed	—
				N x 1-11.....	47.3	102	27	10.0	2.0	50	1 Feed	—
				Harlan.....	43.0	112	27	10.0	1.0	43	2 Feed	—
				Titan.....	37.0	112	27	7.0	1.0	45	2 Feed	—
No significant grain yield difference between varieties.												

## WHEAT POOL DISTRICT 6

<b>KENNETH F. McKENZIE, BELBECK</b>												
2E.....	6	5	B	Vantage.....	86.2	102	36	8.8	3.0	54	1 Feed	—
				N x 1-11.....	70.8	108	36	8.4	3.0	53	1 Feed	—
				Harlan.....	83.9	106	36	9.0	3.0	48	1 Feed	—
				Titan.....	78.9	96	36	8.8	3.0	52	1 Feed	—
Necessary difference—8.9 bushels.												
<b>RONALD KRAMER, EDENWOLD</b>												
3C.....	6	7	C	Vantage.....	83.5	93	36	10.0	1.0	51	1 Feed	—
				N x 1-11.....	98.3	93	35	10.0	1.0	52	1 Feed	—
				Montcalm.....	92.4	91	37	8.0	2.0	51	1 C.W. 6R	—
				B-130.....	73.7	92	37	9.6	1.0	50	1 C.W. 6R	—
Necessary difference—6.4 bushels.												
<b>WAYNE T. ISMOND, ABERNETHY</b>												
3C.....	6	9	B	Vantage.....	61.2	116	31	10.0	1.6	45	2 Feed	—
				N x 1-11.....	51.4	117	31	10.0	2.0	49	1 Feed	—
				Montcalm.....	43.2	116	30	10.0	2.0	48	2 C.W. 6R	—
				B-130.....	19.3	115	31	10.0	2.4	45	2 Feed	—
Test damaged by wind and rain—yields not used in zone summaries.												
<b>KENNETH G. KISTNER, DISLEY</b>												
2B.....	6	10	B	Vantage.....	61.7	95	39	9.2	1.4	50	1 Feed	—
				N x 1-11.....	63.3	97	35	8.8	3.0	52	1 Feed	—
				Harlan.....	77.2	96	33	9.8	1.8	50	1 Feed	—
				Titan.....	67.0	96	35	9.8	1.0	50	1 Feed	—
Necessary difference—7.7 bushels.												
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>												
2E.....	6	6	B	Gerald H. Waller, Drinkwater.								

# WHEAT POOL DISTRICT 7

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Yield per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial Grades	Grading Remarks
<b>CLARENCE A. CONRAD, WAWOTA</b>											
3A.....	7	3	B	Vantage.....	52.5	100	41	8.0	1.8	50	1 Feed —
				N x 1-11.....	55.4	101	42	8.6	1.8	53	1 Feed —
				Montcalm.....	40.7	96	44	5.4	2.6	51	1 C.W. 6R —
				B-130.....	41.2	94	45	7.0	3.0	49	2 C.W. 6R —
Test damaged by shattering—yields not used in zone summaries.											
<b>DENNIS D. HARTNELL, KIPLING</b>											
3A.....	7	4	B	Vantage.....	65.7	—	41	9.8	1.4	50	1 Feed —
				N x 1-11.....	54.3	—	45	9.2	1.2	52	1 Feed —
				Montcalm.....	61.7	—	47	8.6	3.0	50	1 C.W. 6R —
				B-130.....	65.1	—	47	9.0	2.4	48	2 C.W. 6R —
No significant grain yield difference between varieties.											
<b>LARRY M. WIGGINS, FILLMORE</b>											
3A.....	7	5	B	Vantage.....	80.5	—	39	—	—	50	1 Feed —
				N x 1-11.....	62.8	—	38	—	—	49	1 Feed —
				Montcalm.....	61.3	—	39	—	—	48	2 C.W. 6R —
				B-130.....	53.5	—	41	—	—	48	2 C.W. 6R —
Necessary difference—8.2 bushels.											
<b>PETER J. A. THOLL, PEEBLES</b>											
3A.....	7	6	B	Vantage.....	38.9	95	34	6.8	2.0	52	1 Feed —
				N x 1-11.....	29.0	97	35	7.6	1.4	53	1 Feed —
				Montcalm.....	30.8	97	42	6.8	2.0	52	3 C.W. 6R St., G.
				B-130.....	17.4	95	38	6.8	2.2	52	3 C.W. 6R St., G.
Necessary difference—6.0 bushels.											
<b>ROBERT J. ARCHER, BROADVIEW</b>											
3A.....	7	7	A	Vantage.....	59.3	101	36	10.0	1.0	45	2 Feed —
				N x 1-11.....	70.3	100	38	10.0	1.0	49	1 Feed —
				Montcalm.....	67.3	100	38	9.0	2.0	49	2 C.W. 6R —
				B-130.....	53.3	99	36	9.0	2.0	49	2 C.W. 6R —
Necessary difference—5.7 bushels.											
<b>HARVEY G. HACK, ROCANVILLE</b>											
3B.....	7	8	B	Vantage.....	83.3	98	42	8.0	1.0	53	1 Feed —
				N x 1-11.....	84.2	102	44	9.0	2.0	53	1 Feed —
				Montcalm.....	95.6	98	40	8.0	1.0	51	1 C.W. 6R —
				B-130.....	66.8	97	40	7.0	2.0	50	1 C.W. 6R —
Necessary difference—12.0 bushels.											
<b>DOUGLAS C. CLARKE, SPY HILL</b>											
3B.....	7	9	B	Vantage.....	53.9	—	28	10.0	1.0	51	1 Feed —
				N x 1-11.....	61.7	—	31	10.0	1.0	54	1 Feed —
				Montcalm.....	58.8	—	35	9.6	2.0	53	2 C.W. 6R St.
				B-130.....	33.0	—	30	9.2	3.0	52	2 C.W. 6R St.
Necessary difference—9.5 bushels.											
<b>FELIX J. STRADECKI, DUBUC</b>											
3C.....	7	11	A	Vantage.....	36.0	—	—	—	—	47	1 Feed —
				N x 1-11.....	39.8	—	—	—	—	50	1 Feed —
				Montcalm.....	41.5	—	—	—	—	49	2 C.W. 6R —
				B-130.....	23.1	—	—	—	—	45	2 Feed —
Necessary difference—6.2 bushels.											

# WHEAT POOL DISTRICT 8

<b>RODNEY V. F. HABERSTOCK, CHURCHBRIDGE</b>											
3B.....	8	1	B	Vantage.....	54.9	97	35	7.0	2.0	44	2 Feed —
				N x 1-11.....	71.7	96	34	6.0	3.0	47	1 Feed —
				Montcalm.....	65.7	95	38	10.0	1.4	47	3 C.W. 6R —
				B-130.....	53.5	94	30	7.0	3.0	43	2 Feed —
No significant grain yield difference between varieties.											
<b>PATRICK ROONEY, SALTCOATS</b>											
3B.....	8	2	B	Vantage.....	75.0	—	—	—	—	46	1 Feed —
				N x 1-11.....	92.5	—	—	—	—	53	1 Feed —
				Montcalm.....	85.3	—	—	—	—	52	1 C.W. 6R —
				B-130.....	54.1	—	—	—	—	48	2 C.W. 6R —
Necessary difference—8.7 bushels.											
<b>HENRY WASYLYSHEN, GORLITZ</b>											
3C.....	8	6	B	Vantage.....	78.4	105	36	9.0	1.0	47	1 Feed —
				N x 1-11.....	85.8	107	36	9.0	1.0	53	1 Feed —
				Montcalm.....	85.0	105	36	8.2	2.0	51	1 C.W. 6R —
				B-130.....	64.4	98	37	8.6	2.4	48	2 C.W. 6R —
Necessary difference—11.0 bushels.											

# Wheat Pool District 8—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial Grades	Grading Remarks
<b>DONALD W. SNODGRASS, STURGIS</b>												
3B.....	8	8	B	Vantage.....	43.7	108	28	9.0	2.0	49	1 Feed	—
				N x 1-11.....	47.6	107	28	10.0	2.0	53	1 Feed	—
				Montcalm.....	46.7	107	30	8.0	3.0	51	2 C.W. 6R	St.
				B-130.....	24.8	109	30	8.0	1.0	49	2 C.W. 6R	—
Necessary difference—6.4 bushels.												
<b>BILL HROMYK, ARRAN</b>												
3B.....	8	10	B	Vantage.....	34.1	100	33	—	—	47	1 Feed	—
				N x 1-11.....	38.9	100	32	—	—	52	1 Feed	—
				Montcalm.....	34.8	100	34	—	—	51	2 C.W. 6R	I.
				B-130.....	32.2	97	33	—	—	49	2 C.W. 6R	—
No significant grain yield difference between varieties.												
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>												
3C.....	8	3	B	Alfred J. Schick, Birmingham.								
3C.....	8	4	B	George E. Lazurko, Willowbrook.								

# WHEAT POOL DISTRICT 9

<b>STANLEY W. WALDEGGER, DYSART</b>												
3C.....	9	2	B	Vantage.....	57.5	104	34	10.0	1.0	49	1 Feed	—
				N x 1-11.....	55.0	109	35	10.0	1.6	51	1 Feed	—
				Montcalm.....	51.7	110	37	10.0	1.4	51	1 C.W. 6R	—
				B-130.....	49.9	100	36	10.0	1.0	49	2 C.W. 6R	—
Necessary difference—3.6 bushels.												
<b>RAYMOND COCKWILL, KELLIHER</b>												
3C.....	9	3	B	Vantage.....	48.9	—	28	8.8	1.0	46	1 Feed	—
				N x 1-11.....	54.5	—	30	8.2	1.0	49	1 Feed	—
				Montcalm.....	47.0	—	33	8.6	1.0	48	2 C.W. 6R	—
				B-130.....	38.8	—	31	8.4	1.0	46	3 C.W. 6R	—
Necessary difference—5.4 bushels.												
<b>FRANK R. BLAKE, DUVAL</b>												
2B.....	9	5	B	Vantage.....	73.4	97	34	9.8	2.2	49	1 Feed	—
				N x 1-11.....	67.5	92	33	9.4	3.0	52	1 Feed	—
				Harlan.....	74.6	93	33	8.8	2.8	47	1 Feed	—
				Titan.....	58.6	89	31	8.2	2.0	49	1 Feed	—
Necessary difference—6.0 bushels.												
<b>REINHOLD R. WODTKE, PUNNICHY</b>												
3C.....	9	7	A	Vantage.....	65.3	107	38	10.0	1.0	51	1 Feed	—
				N x 1-11.....	66.1	110	38	10.0	1.0	53	1 Feed	—
				Montcalm.....	52.3	108	48	9.0	2.0	53	2 C.W. 6R	St.
				B-130.....	43.7	104	44	9.0	3.0	51	2 C.W. 6R	St.
Necessary difference—9.1 bushels.												
<b>MERVIN H. ARNST, JANSEN</b>												
2B.....	9	8	B	Vantage.....	51.0	—	—	—	—	45	2 Feed	—
				N x 1-11.....	57.1	—	—	—	—	49	1 Feed	—
				Harlan.....	60.6	—	—	—	—	44	2 Feed	—
				Titan.....	43.8	—	—	—	—	45	2 Feed	—
No significant grain yield difference between varieties.												
<b>HAROLD TAYLOR, ELFROS</b>												
3C.....	9	10	A	Vantage.....	64.4	—	—	—	—	50	1 Feed	—
				N x 1-11.....	73.8	—	—	—	—	54	1 Feed	—
				Montcalm.....	64.4	—	—	—	—	52	2 C.W. 6R	St.
				B-130.....	37.5	—	—	—	—	48	2 C.W. 6R	—
Necessary difference—12.0 bushels.												
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>												
2B.....	9	6	B	Robert F. Edwards, Nokomis.								

# WHEAT POOL DISTRICT 10

<b>ALPHONSE M. GRETER, CHAMBERLAIN</b>												
2B.....	10	1	C	Vantage.....	70.6	—	—	—	—	48	1 Feed	—
				N x 1-11.....	70.7	—	—	—	—	50	1 Feed	—
				Harlan.....	74.2	—	—	—	—	46	1 Feed	—
				Titan.....	64.6	—	—	—	—	46	1 Feed	—
No significant grain yield difference between varieties.												
<b>EARLE B. SOMERVILLE, MILDEN</b>												
2F.....	10	4	C	Vantage.....	59.5	109	39	9.4	1.4	49	1 Feed	—
				N x 1-11.....	55.0	109	39	9.2	2.2	51	1 Feed	—
				Harlan.....	66.9	105	37	9.6	1.4	47	1 Feed	—
				Titan.....	55.4	109	38	10.0	1.0	49	1 Feed	—
No significant grain yield difference between varieties.												

# Wheat Pool District 10—Continued

Cereal Variety Zone	Dist.	Sub- Dist.	Test Desig- nation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per meas- ured bushel	Com- mercial Grades	Grading Remarks
<b>ELDON B. MADSEN, BRODERICK</b>												
2B.....	10	6	B	Vantage.....	36.0	86	24	10.0	3.0	50	1 Feed	—
				N x 1-11.....	43.6	89	25	10.0	3.0	50	1 Feed	—
				Harlan.....	37.2	92	24	10.0	3.0	45	2 Feed	—
				Titan.....	32.4	85	23	10.0	2.8	49	1 Feed	—
Necessary difference—3.9 bushels.												
<b>J. BERTAL SERVIS, RENOWN</b>												
2B.....	10	8	C	Vantage.....	92.4	—	—	10.0	1.0	51	1 Feed	—
				N x 1-11.....	74.2	—	—	9.4	3.0	52	1 Feed	—
				Harlan.....	92.6	—	—	10.0	1.0	48	1 Feed	—
				Titan.....	63.2	—	—	9.8	1.0	49	1 Feed	—
Necessary difference—12.9 bushels.												
<b>MARVIN N. EVANS, KENASTON</b>												
2B.....	10	9	B	Vantage.....	73.4	—	—	—	—	52	1 Feed	—
				N x 1-11.....	94.2	—	—	—	—	52	1 Feed	—
				Harlan.....	78.5	—	—	—	—	47	1 Feed	—
				Titan.....	78.8	—	—	—	—	49	1 Feed	—
No significant grain yield difference between varieties.												

# WHEAT POOL DISTRICT 11

<b>GLENN R. GUNDERSON, KYLE</b>												
1A.....	11	1	B	Vantage.....	83.9	—	—	—	—	46	1 Feed	—
				N x 1-11.....	89.9	—	—	—	—	52	1 Feed	—
				Harlan.....	80.7	—	—	—	—	46	1 Feed	—
				Titan.....	63.8	—	—	—	—	48	1 Feed	—
Necessary difference—9.7 bushels.												
<b>LEIF M. SONMOR, FORGAN</b>												
1A.....	11	2	B	Vantage.....	57.6	—	—	—	—	52	1 Feed	—
				N x 1-11.....	68.0	—	—	—	—	51	1 Feed	—
				Harlan.....	54.6	—	—	—	—	47	Rej.	E.
				Titan.....	45.8	—	—	—	—	47	Rej.	E.
Necessary difference—7.6 bushels.												
<b>MARVIN M. NUNWEILER, LaPORTE</b>												
1B.....	11	4	D	Vantage.....	51.0	—	—	—	—	45	2 Feed	—
				N x 1-11.....	50.8	—	—	—	—	47	1 Feed	—
				Harlan.....	56.8	—	—	—	—	47	1 Feed	—
				Titan.....	46.9	—	—	—	—	45	2 Feed	—
Necessary difference—5.1 bushels.												
<b>JACK B. ROBERTSON, MERID</b>												
1B.....	11	5	C	Vantage.....	66.8	97	18	9.0	1.0	52	1 Feed	—
				N x 1-11.....	31.9	92	13	9.0	1.0	52	1 Feed	—
				Harlan.....	74.0	97	18	10.0	1.0	48	1 Feed	—
				Titan.....	58.2	97	18	10.0	1.0	50	1 Feed	—
Damaged by hail—Yields not used in zone summaries.												
<b>JOHN A. COCHRANE, ROSETOWN</b>												
2F.....	11	7	B	Vantage.....	81.1	112	26	10.0	1.0	50	1 Feed	—
				N x 1-11.....	79.3	113	26	10.0	1.0	50	1 Feed	—
				Harlan.....	80.5	110	24	10.0	2.0	48	1 Feed	—
				Titan.....	72.3	108	25	10.0	1.0	49	1 Feed	—
No significant grain yield difference between varieties.												
<b>BERNIE BORS, McGEE</b>												
2F.....	11	8	B	Vantage.....	83.4	—	—	—	—	50	1 Feed	—
				N x 1-11.....	63.7	—	—	—	—	51	1 Feed	—
				Harlan.....	77.2	—	—	—	—	49	1 Feed	—
				Titan.....	84.6	—	—	—	—	50	1 Feed	—
N x 1-11 damaged—yields not used in zone summaries.												
<b>ROY I. NEIL, COLEVILLE</b>												
1A.....	11	9	B	Vantage.....	47.9	—	28	9.0	2.0	46	1 Feed	—
				N x 1-11.....	34.7	—	25	7.8	3.0	49	1 Feed	—
				Harlan.....	37.2	—	27	9.2	1.2	43	2 Feed	—
				Titan.....	35.3	—	26	9.2	1.2	45	2 Feed	—
Necessary difference—3.8 bushels.												

# WHEAT POOL DISTRICT 12

<b>ADOLPH MUTH, CANDO</b>												
2D.....	12	2	B	Vantage.....	44.9	—	27	9.0	1.0	50	1 Feed	—
				N x 1-11.....	50.9	—	32	8.2	3.0	52	1 Feed	—
				Harlan.....	45.3	—	26	9.0	1.0	46	1 Feed	—
				Titan.....	40.9	—	27	10.0	1.0	47	1 Feed	—
No significant grain yield difference between varieties.												

# Wheat Pool District 12—Continued

Cereal Variety	Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial Grades	Grading Remarks
<b>ARCHIE D. REID, LILYDALE</b>													
3E.....	12	8	C		Vantage.....	71.5	96	51	9.4	2.4	51	1 Feed	—
					N x 1-11.....	76.2	97	51	7.8	2.0	54	1 Feed	—
					Montcalm.....	66.0	96	55	7.8	1.6	52	1 C.W. 6R	—
					B-130.....	57.7	97	52	7.2	2.0	52	1 C.W. 6R	—
Necessary difference—9.8 bushels.													
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.</b>													
2D.....	12	1	B		Wilfred Desrosiers, Biggar.								
2D.....	12	4	B		Wilfred A. Welter, Broadacres.								
2D.....	12	7	B		Robert J. Cooper, Senlac.								
3G.....	12	10	B		Garry H. Nelson, Prongua.								

# WHEAT POOL DISTRICT 13

<b>MAXINE J. DIETRICK, LEROY</b>													
3C.....	13	1	B		Vantage.....	23.7	99	16	—	2.0	46	1 Feed	—
					N x 1-11.....	38.3	105	18	—	2.0	49	1 Feed	—
					Montcalm.....	26.8	105	20	—	2.0	48	2 C.W. 6R	—
					B-130.....	27.0	99	16	—	2.0	46	3 C.W. 6R	—
Necessary difference—2.9 bushels.													
<b>H. BRUCE HAUGHN, HANLEY</b>													
2B.....	13	3	B		Vantage.....	73.4	105	29	10.0	1.0	53	1 Feed	—
					N x 1-11.....	71.1	108	29	10.0	3.0	54	1 Feed	—
					Harlan.....	91.8	101	28	10.0	3.0	49	1 Feed	—
					Titan.....	59.1	105	29	10.0	1.0	52	1 Feed	—
Necessary difference—9.9 bushels.													
<b>ARTHUR J. CALLAGHAN, BLUCHER</b>													
2B.....	13	4	B		Vantage.....	20.3	—	20	9.0	2.0	46	1 Feed	—
					N x 1-11.....	26.5	—	19	10.0	3.0	49	1 Feed	—
					Harlan.....	21.1	—	18	9.0	2.0	42	3 Feed	—
					Titan.....	17.4	—	14	10.0	1.0	45	2 Feed	—
Necessary difference—4.2 bushels.													
<b>B. W. LLOYD BROWN, GRASSWOOD</b>													
2B.....	13	5	B		Vantage.....	30.5	107	23	9.0	1.4	49	1 Feed	—
					N x 1-11.....	34.5	107	23	9.0	2.0	54	1 Feed	—
					Harlan.....	27.7	112	22	9.0	1.2	45	2 Feed	—
					Titan.....	21.8	103	20	9.0	2.0	48	1 Feed	—
Necessary difference—5.5 bushels.													
<b>ALPHONSE SCHLOSSER, BREMEN</b>													
3C.....	13	9	B		Vantage.....	39.0	—	—	—	—	46	1 Feed	—
					N x 1-11.....	34.0	—	—	—	—	48	1 Feed	—
					Montcalm.....	25.4	—	—	—	—	46	1 Feed	W.
					B-130.....	11.2	—	—	—	—	43	2 Feed	—
Damaged by livestock—yields not used in zone summaries.													
<b>ALVIN J. HESSDORFER, ST. BENEDICT</b>													
3B.....	13	10	A		Vantage.....	47.6	103	22	10.0	2.0	46	1 Feed	—
					N x 1-11.....	55.6	101	21	10.0	1.0	49	1 Feed	—
					Montcalm.....	44.6	102	28	10.0	1.0	49	2 C.W. 6R	—
					B-130.....	42.3	104	18	10.0	1.0	46	3 C.W. 6R	—
Necessary difference—5.3 bushels.													

# WHEAT POOL DISTRICT 14

<b>JAMES N. WILSON, OKLA</b>													
4A.....	14	1	B		Vantage.....	59.7	—	—	—	2.0	47	1 Feed	—
					N x 1-11.....	56.8	—	—	—	1.0	51	1 Feed	—
					Montcalm.....	36.7	—	—	—	3.0	49	1 Feed	W., St.
					B-130.....	28.9	—	—	—	2.0	49	1 Feed	W., St.
Yields not used in zone summaries due to wide variations within the test.													
<b>LAWRENCE R. PARKER, SILVER PARK</b>													
4A.....	14	3	B		Vantage.....	38.2	93	31	10.0	2.0	49	1 Feed	—
					N x 1-11.....	44.8	97	30	10.0	2.0	50	1 Feed	—
					Montcalm.....	43.0	92	30	10.0	2.0	51	1 Feed	W.
					B-130.....	30.3	90	31	10.0	2.0	46	1 Feed	W.
Necessary difference—6.5 bushels.													
<b>RONALD H. C. HIRTLE, NOBLEVILLE</b>													
4A.....	14	5	B		Vantage.....	63.2	—	—	—	—	49	1 Feed	—
					N x 1-11.....	82.4	—	—	—	—	52	1 Feed	—
					Montcalm.....	75.1	—	—	—	—	51	2 C.W. 6R	St.
					B-130.....	49.7	—	—	—	—	47	3 C.W. 6R	—
Necessary difference—6.0 bushels.													



# Wheat Pool District 14—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial Grades	Grading Remarks
<b>ALVIN R. TOUET, CARRAGANA</b>												
3F.....	14	6	B	Vantage.....	75.4	102	46	9.6	1.2	48	1 Feed	—
				N x 1-11.....	69.2	101	42	8.0	1.8	50	1 Feed	—
				Montcalm.....	53.1	102	44	6.6	2.0	48	2 C.W. 6R	—
				B-130.....	58.0	101	47	8.0	2.0	51	1 C.W. 6R	—
Test damaged by gophers—yields not used in zone summaries.												
<b>OREST NAWROCKI, SYLVANIA</b>												
3F.....	14	7	C	Vantage.....	36.0	—	—	—	—	52	1 Feed	—
				N x 1-11.....	44.4	—	—	—	—	51	1 Feed	—
				Montcalm.....	56.7	—	—	—	—	51	1 C.W. 6R	—
				B-130.....	38.4	—	—	—	—	51	1 C.W. 6R	—
No significant grain yield difference between varieties.												
<b>NORMAN S. UFFELMAN, MELFORT</b>												
3D.....	14	8	B	Vantage.....	34.7	108	26	10.0	2.0	46	1 Feed	—
				N x 1-11.....	47.4	108	27	10.0	2.0	50	1 Feed	—
				Montcalm.....	41.2	107	29	10.0	2.0	47	3 C.W. 6R	—
				B-130.....	26.3	108	26	10.0	2.0	45	2 Feed	—
Necessary difference—7.3 bushels.												
<b>MORRIS ZWOZDESKY, AYLSHAM</b>												
3F.....	14	10	B	Vantage.....	56.1	—	—	—	—	49	1 Feed	—
				N x 1-11.....	53.3	—	—	—	—	51	1 Feed	—
				Montcalm.....	47.8	—	—	—	—	49	2 C.W. 6R	—
				B-130.....	31.8	—	—	—	—	48	2 C.W. 6R	—
Necessary difference—3.4 bushels.												
<b>CLARENCE A. REED, LEACROSS</b>												
3F.....	14	10	C	Vantage.....	53.9	—	—	—	—	51	1 Feed	—
				N x 1-11.....	57.1	—	—	—	—	53	1 Feed	—
				Montcalm.....	59.5	—	—	—	—	52	2 C.W. 6R	St.
				B-130.....	41.2	—	—	—	—	50	2 C.W. 6R	St.
Necessary difference—7.5 bushels.												
<b>LORNE A. BIGRAS, AYLSHAM</b>												
3F.....	14	11	C	Vantage.....	31.2	—	—	—	—	47	1 Feed	—
				N x 1-11.....	56.0	—	—	—	—	47	1 Feed	—
				Montcalm.....	39.9	—	—	—	—	47	3 C.W. 6R	—
				B-130.....	51.6	—	—	—	—	48	2 C.W. 6R	—
Necessary difference—9.4 bushels.												
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes</b>												
3F.....	14	4	C	Allan A. Cote, Sylvania.								
3D.....	14	9	B	Barbara Ann South, Whittome.								

# WHEAT POOL DISTRICT 15

<b>GILBERT A. STREETON, MESKANAW</b>												
3D.....	15	1	B	Vantage.....	65.8	94	25	10.0	1.0	46	1 Feed	—
				N x 1-11.....	78.3	94	28	10.0	1.8	50	1 Feed	—
				Montcalm.....	65.8	95	25	9.8	2.0	49	2 C.W. 6R	—
				B-130.....	40.3	93	27	9.4	2.0	46	3 C.W. 6R	—
Necessary difference—6.2 bushels.												
<b>LEONA M. TIENKAMP, FENTON</b>												
3D.....	15	1	C	Vantage.....	40.1	—	30	10.0	1.0	44	2 Feed	—
				N x 1-11.....	55.1	—	33	8.8	2.0	47	1 Feed	—
				Montcalm.....	39.6	—	35	8.0	2.5	47	3 C.W. 6R	—
				B-130.....	30.0	—	30	7.0	3.0	40	3 Feed	—
Necessary difference—4.4 bushels.												
<b>BRUCE A. KING, HOEY</b>												
3D.....	15	2	B	Vantage.....	41.6	—	25	—	—	45	2 Feed	—
				N x 1-11.....	50.5	—	29	—	—	49	1 Feed	—
				Montcalm.....	45.5	—	33	—	—	47	3 C.W. 6R	—
				B-130.....	38.6	—	32	—	—	46	3 C.W. 6R	—
Necessary difference—6.5 bushels.												
<b>MAXWELL L. DAVIES, RED DEER HILL</b>												
3D.....	15	3	B	Vantage.....	48.3	89	16	—	1.8	48	1 Feed	—
				N x 1-11.....	38.7	89	14	—	2.2	51	1 Feed	—
				Montcalm.....	42.7	89	18	—	1.8	50	2 C.W. 6R	St.
				B-130.....	28.1	89	15	—	2.0	49	2 C.W. 6R	—
Test damaged by shattering—yields not used in zone summaries.												

# Wheat Pool District 15—Continued

Cereal Variety Zone	Dist.	Sub- Dist.	Test Desig- nation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per meas- ured bushel	Com- mercial Grades	Grading Remarks
<b>LAWRENCE COLLINS, ORMEAUX</b>												
4B.....	15	7	B	Vantage.....	77.8	—	—	—	1.0	48	1 Feed	—
				N x 1-11.....	78.0	—	—	—	1.0	51	1 Feed	—
				Montcalm.....	73.4	—	—	—	2.0	50	2 C.W. 6R	St.
				B-130.....	65.3	—	—	—	3.0	45	2 Feed	—
Necessary difference—4.4 bushels.												
<b>DOREEN ANDERSON, NORTHSIDE</b>												
3B.....	15	9	B	Vantage.....	40.7	—	—	—	—	44	2 Feed	—
				N x 1-11.....	52.6	—	—	—	—	47	1 Feed	—
				Montcalm.....	57.6	—	—	—	—	47	3 C.W. 6R	—
				B-130.....	44.0	—	—	—	—	46	3 C.W. 6R	—
Necessary difference—8.4 bushels.												
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes</b>												
3B.....	15	8	B	Reginald Nelson, Briarlea.								

## WHEAT POOL DISTRICT 16

<b>WILFRED BLANCHETTE, VAWN</b>												
3E.....	16	4	B	Vantage.....	57.4	—	47	—	1.0	43	2 Feed	—
				N x 1-11.....	59.5	—	45	—	1.8	43	2 Feed	—
				Montcalm.....	66.4	—	45	—	2.8	45	2 Feed	—
				B-130.....	68.7	—	46	—	3.0	45	2 Feed	—
No significant grain yield difference between varieties.												
<b>KEN W. WESSON, MAIDSTONE</b>												
3E.....	16	5	C	Vantage.....	44.9	105	44	9.6	1.4	52	1 Feed	—
				N x 1-11.....	45.1	107	44	9.6	1.4	51	1 Feed	—
				Montcalm.....	44.7	105	48	8.8	2.4	52	1 C.W. 6R	—
				B-130.....	60.5	103	48	8.4	2.2	51	1 C.W. 6R	—
Necessary difference—7.9 bushels.												
<b>JAMES W. TOWNLEY-SMITH, LASHBURN</b>												
3E.....	16	6	B	Vantage.....	76.5	—	—	—	—	50	1 Feed	—
				N x 1-11.....	69.4	—	—	—	—	49	1 Feed	—
				Montcalm.....	63.4	—	—	—	—	48	2 C.W. 6R	—
				B-130.....	52.3	—	—	—	—	48	2 C.W. 6R	—
Necessary difference—13.0 bushels.												
<b>HERBERT P. WIENS, GLENBUSH</b>												
4B.....	16	9	B	Vantage.....	49.3	91	39	10.0	1.0	51	1 Feed	—
				N x 1-11.....	46.1	91	38	9.4	1.0	51	1 Feed	—
				Montcalm.....	49.2	90	49	7.2	2.0	51	2 C.W. 6R	G.
				B-130.....	36.8	90	48	8.4	2.0	48	3 C.W. 6R	G.
Necessary difference—4.5 bushels.												
<b>WILLIAM J. STORY, RANGER</b>												
4B.....	16	10	B	Vantage.....	45.5	100	38	9.8	1.0	51	1 Feed	—
				N x 1-11.....	47.0	97	38	9.8	2.0	52	1 Feed	—
				Montcalm.....	47.4	94	42	8.8	2.2	51	2 C.W. 6R	St.
				B-130.....	41.1	92	42	7.0	3.0	51	2 C.W. 6R	St.
No significant grain yield difference between varieties.												
<b>GLEN &amp; BUD BACHELDER, MULLINGAR</b>												
3G.....	16	10	C	Vantage.....	56.8	—	—	7.0	1.0	49	1 Feed	—
				N x 1-11.....	47.6	—	—	9.0	2.0	50	1 Feed	—
				Montcalm.....	54.9	—	—	7.4	3.0	50	3 C.W. 6R	W., St.
				B-130.....	43.2	—	—	8.2	1.0	51	3 C.W. 6R	W., St.
No significant grain yield difference between varieties.												
<b>LAWRENCE A. BISHOP, SOUTH MAKWA</b>												
4B.....	16	11	A	Vantage.....	52.9	89	44	8.4	1.2	45	2 Feed	—
				N x 1-11.....	65.9	84	44	8.2	1.2	54	1 Feed	—
				Montcalm.....	68.2	82	44	8.2	1.4	50	3 C.W. 6R	St.
				B-130.....	64.6	89	44	8.0	1.4	48	3 C.W. 6R	St.
No significant grain yield difference between varieties.												
<b>Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes</b>												
4B.....	16	7	B	Benny Leer, Butte St. Pierre.								
3E.....	16	8	B	Shirley A. George, Mervin.								
4B.....	16	8	C	Keith L. Hunter, Spruce Lake.								

## FLAX TESTS

A total of 42 flax tests were undertaken in 1952, and these were conducted in Cereal Variety Zones 2A, 2E, 3A, 3B, 3C, 3F and 4A (see Cereal Variety Zone map, page 39). The varieties were Royal, Marine, Redwing, Redwood and Rocket.

### DESCRIPTION OF VARIETIES

**Royal** was originated at the University of Saskatchewan by selection from Crown. It is late maturing and has slightly weak straw. It is moderately resistant to wilt but is susceptible to rust under some conditions. Royal has medium-sized light brown seeds. The oil content of Royal is reasonably high but its quality is lower than that of the recommended varieties. Royal is a high yielding variety but has been removed from the recommended list in Saskatchewan because of its susceptibility to rust.

**Marine** was originated at the North Dakota Experiment Station, Fargo, from the cross C.I. 975 X Sheyenne. It is immune to the present races of rust and is resistant to wilt. Marine is an early maturing variety. It has brown seeds which produce a high percentage of good quality oil. Marine is a licensed variety which is still undergoing tests in Saskatchewan.

**Redwing** was developed by selection at the Minnesota Agricultural Experiment Station in co-operation with the United States Department of Agriculture. It is susceptible to rust and resistant to wilt. Compared with Royal it is lower in yield, stronger in straw, lower in oil extraction but higher in quality, and about one week earlier in maturity. It is recommended for four northern zones where early maturity is of primary importance. It is also given limited recommendation in two other zones in cases where an early variety is needed.

**Redwood** was developed by the Minnesota Agricultural Experiment Station, in co-operation with the United States Department of Agriculture, from the cross B. 5128 X Redson. It is immune to the present races of rust and is resistant to wilt. Redwood is a late maturing variety. It has brown seeds which produce high quality oil. Redwood is a licensed variety which is still undergoing tests in Saskatchewan.

**Rocket** was developed at the Central Experimental Farm, Ottawa, from the cross Argentine 8C X Redwing. It is resistant to rust and moderately resistant to wilt. Rocket is mid-late in maturity. It has large brown seeds which produce a high quantity of good quality oil. It is a high yielding variety which is recommended for use in most zones of Saskatchewan.

TABLE No. 48.—AVERAGE YIELDS IN BUSHELS PER ACRE  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	No. of Satisfactory Tests	Royal	Marine	Redwing	Redwood	Rocket	Necessary Difference* in Bushels
2A.....	5	22.2	17.7	16.1	18.7	19.3	2.2
2E.....	2	21.7	20.0	19.7	21.8	20.7	N.S.
3A.....	7	19.3	18.7	16.4	19.6	19.2	2.2
3B.....	9	17.8	17.6	14.4	18.7	18.3	1.6
3C.....	8	15.9	15.6	14.0	16.7	14.0	N.S.
4A.....	2	22.9	22.7	21.8	20.5	19.4	N.S.

\***Necessary Difference.**—Since yielding ability of varieties cannot be measured with absolute accuracy, small differences have no significance. Unless the difference in yield of two varieties is greater than the necessary difference as shown in the tables, little confidence can be placed in the superiority of one variety over the other in that particular zone group.

N.S.—No significant grain yield difference between varieties.

Note.—Only one satisfactory test was conducted in zone 3F.

### Grain Yield and Official Recommendations

An average of all tests shows that **Redwood** was high in yield, followed closely by **Royal**. Redwood outyielded the other varieties in four of the six zones. It placed third in Zone 2A, and fourth in Zone 4A. Royal outyielded

the other varieties in two zones. It ranked second in three zones, and third in one. Redwood was included in Wheat Pool tests for the first time in 1952. It is a new variety, and has been licensed for use in Canada. However, no official recommendations will be made regarding its use in Saskatchewan until further tests have been carried out. Royal has been used as the standard variety in Wheat Pool tests for a number of years. In the past it has been one of the highest yielding varieties under Saskatchewan conditions, but during recent years Royal has sustained severe damage from rust. At one time Royal was considered resistant to rust, but it now shows susceptibility under certain conditions, and for this reason it was removed from the list of recommended varieties for all zones in 1953.

**Rocket** placed third in average yield, but generally the differences between this variety and Redwood and Royal were of a minor nature. It ranked second in two zones, third in two, and tied for fourth place in Zone 3C. Rocket was outyielded by all other varieties in Zone 4A. Rocket is now the best rust-resistant variety available, and is recommended for use in all zones except 3E, 3H, 4A, and 4B.

**Marine** placed fourth in yield in four of the six zones. It placed second in the northerly zone 4A, and third in 3C. Marine was used in Wheat Pool tests for the first time in 1952. It is a licensed variety but official recommendations regarding its use in Saskatchewan will not be made until further tests are carried out. Marine matures earlier than most of the recommended varieties, and for this reason it may be useful in areas where the frost-free season is short.

**Redwing** was outyielded by all other varieties in four zones. It tied with Rocket for fourth place in Zone 3C, and was third in Zone 4A. Redwing is not considered a high yielding variety, but its early maturity is useful under certain conditions. Because of this feature it is officially recommended for Zones 3H, 4A and 4B, and is also recommended in Zones 3B and 3F, in cases where an early maturing variety is needed.

TABLE No. 49.—AVERAGE NUMBER OF DAYS FROM SEEDING TO RIPENING  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Royal	Marine	Redwing	Redwood	Rocket
2A.....	103.0	92.0	90.0	100.0	103.0
2E.....					
3A.....	110.5	111.5	111.0	111.5	111.0
3B.....	109.0	103.5	103.8	108.0	111.3
3C.....	110.2	106.2	103.4	108.4	110.6
4A.....					

Table No. 49. **Redwing** and **Marine** ripened early in most zones, with **Redwood**, **Royal** and **Rocket** following in that order.

TABLE No. 50.—AVERAGE WEIGHT PER MEASURED BUSHEL  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Royal	Marine	Redwing	Redwood	Rocket
2A.....	54.0	53.4	54.2	54.0	53.2
2E.....	53.0	54.0	55.0	54.0	52.5
3A.....	53.6	53.7	55.0	53.7	53.3
3B.....	53.6	53.9	54.8	53.8	53.1
3C.....	53.2	53.9	54.5	53.5	52.9
4A.....	52.0	52.5	53.0	51.5	51.5

Table No. 50. **Redwing** consistently exceeded the other varieties in bushel weight. **Marine** and **Redwood** were practically equal. **Royal** placed fourth, and **Rocket** was outweighed by the other varieties in every zone.

#### Commercial Grades

All varieties were satisfactory in grading ability. **Redwing** excelled because of its superior bushel weight and early maturity. It was followed closely by **Marine**. There was little difference between the grades of **Royal**, **Rocket** and **Redwood**.

## SUMMARIZATION ACCORDING TO CEREAL VARIETY ZONES

**TABLE No. 51.—SUMMARIZED RESULTS FOR ZONE 2A**  
(5 satisfactory tests)

	Royal	Marine	Redwing	Redwood	Rocket
Yield in bushels per acre.....	22.2	17.7	16.1	18.7	19.3
Days from seeding to ripening.....	103.0	92.0	90.0	100.0	103.0
Height of plants in inches.....	20.3	18.0	18.0	19.3	20.7
Bushel weight in pounds.....	54.0	53.4	54.2	54.0	53.2
Commercial grades in percentage: 1 C.W.....	100.0	100.0	100.0	100.0	100.0

Necessary difference—2.2 bushels.

Table No. 51. **Royal** was high in yield, exceeding all other varieties significantly. It was late in ripening.

**Rocket** placed second in yield, but exceeded only **Redwing** significantly. It was late in ripening and slightly lower in bushel weight than the other varieties.

**Redwood** was third in yield, exceeding **Redwing** significantly.

**Marine** placed fourth in yield. It ripened comparatively early.

**Redwing** was outyielded by all other varieties, but excelled in bushel weight, and ripened much earlier than **Royal**, **Redwood** and **Rocket**.

**TABLE No. 52.—SUMMARIZED RESULTS FOR ZONE 2E**  
(2 satisfactory tests)

	Royal	Marine	Redwing	Redwood	Rocket
Yield in bushels per acre.....	21.7	20.0	19.7	21.8	20.7
Days from seeding to ripening.....	—	—	—	—	—
Height of plants in inches.....	—	—	—	—	—
Bushel weight in pounds.....	53.0	54.0	55.0	54.0	52.5
Commercial grades in percentage: 1 C.W.....	100.0	100.0	100.0	100.0	100.0

No significant grain yield difference between varieties.

Table No. 52. Only two satisfactory tests were completed in this zone, and the data obtained cannot be considered adequate for complete coverage of the area. The yield differences, therefore, should not be considered of major significance. On the basis of the results of these two tests, however, **Royal** and **Redwood** were practically equal in yield. **Redwood** had slightly higher bushel weight but the samples for both varieties graded 1 C.W.

**Rocket** placed third in yield and was slightly lower than the other varieties in bushel weight.

**Marine** placed fourth in yield, and **Redwing** fifth, but the difference between these varieties was of a minor nature. As in most other zones **Redwing** was superior to the other varieties in bushel weight.

**TABLE No. 53.—SUMMARIZED RESULTS FOR ZONE 3A**  
(7 satisfactory tests)

	Royal	Marine	Redwing	Redwood	Rocket
Yield in bushels per acre.....	19.3	18.7	16.4	19.6	19.2
Days from seeding to ripening.....	110.5	111.5	111.0	111.5	111.0
Height of plants in inches.....	19.8	17.8	17.5	19.0	19.8
Bushel weight in pounds.....	53.6	53.7	55.0	53.7	53.3
Commercial grades in percentage: 1 C.W.....	100.0	100.0	100.0	100.0	100.0

Necessary difference—2.2 bushels.

Table No. 53. The yield differences between **Redwood**, **Royal** and **Rocket** in Zone 3A were of no significance, and in other characteristics these three varieties were practically equal. **Redwood** ripened one day later than **Royal**. All three varieties outyielded **Redwing** significantly.

**Marine** placed fourth in yield, and outyielded **Redwing** significantly.

**Redwing** was outyielded by all other varieties, but was superior in bushel weight.



**TABLE No. 54.—SUMMARIZED RESULTS FOR ZONE 3B**  
(9 satisfactory tests)

	Royal	Marine	Redwing	Redwood	Rocket
Yield in bushels per acre.....	17.8	17.6	14.4	18.7	18.3
Days from seeding to ripening.....	109.0	103.5	103.8	108.0	111.3
Height of plants in inches.....	24.7	24.3	24.3	24.3	23.6
Bushel weight in pounds.....	53.6	53.9	54.8	53.8	53.1
Commercial grades in percentage: 1 C.W.....	40.0	90.0	90.0	30.0	40.0
2 C.W.....	50.0	10.0	10.0	50.0	50.0
3 C.W.....	10.0	—	—	20.0	10.0

Necessary difference—1.6 bushels.

Table No. 54. **Redwood** was high in yield, but its yield superiority was significant only in the case of Redwing. Redwood ripened earlier than Royal and Rocket, and exceeded these varieties slightly in bushel weight.

**Rocket** placed second in yield, exceeding Redwing significantly. It ripened late and was slightly lower than the other varieties in bushel weight.

**Royal** placed third in yield, exceeding Redwing by a significant margin. It was satisfactory in other characteristics.

**Marine** was fourth in yield, exceeding Redwing by a significant difference. Compared with Redwood, Rocket and Royal, it ripened from 4.5 to 7.8 days earlier, and was superior in grading ability.

**Redwing** was outyielded significantly by all other varieties. It was equal to Marine in commercial grades, and was practically equal in time of maturity. It excelled in bushel weight.

**TABLE No. 55.—SUMMARIZED RESULTS FOR ZONE 3C**  
(8 satisfactory tests)

	Royal	Marine	Redwing	Redwood	Rocket
Yield in bushels per acre.....	15.9	15.6	14.0	16.7	14.0
Days from seeding to ripening.....	110.2	106.2	103.4	108.4	110.6
Height of plants in inches.....	22.6	21.1	21.9	23.4	21.6
Bushel weight in pounds.....	53.2	53.9	54.5	53.5	52.9
Commercial grades in percentage: 1 C.W.....	80.0	100.0	100.0	60.0	70.0
2 C.W.....	10.0	—	—	30.0	30.0
3 C.W.....	10.0	—	—	10.0	—

No significant grain yield difference between varieties.

Table No. 55. Yield differences in this zone were not significant and should not be considered of major importance.

**Redwood** was the highest yielding variety, however, and ripened earlier than Royal and Rocket. It exceeded these two varieties slightly in bushel weight but was slightly inferior in grading ability.

**Royal** placed second in yield, but ripened later than all varieties except Rocket.

**Marine** was third in yield, ripened relatively early, produced good bushel weight and graded well.

**Rocket** and **Redwing** were equal in yield. Redwing was considerably earlier than any of the other varieties, and excelled in bushel weight and grades. Rocket was late in ripening and was lower in bushel weight than the other varieties.

**TABLE No. 56.—SUMMARIZED RESULTS FOR ZONE 4A**  
(2 satisfactory tests)

	Royal	Marine	Redwing	Redwood	Rocket
Yield in bushels per acre.....	22.9	22.7	21.8	20.5	19.4
Days from seeding to ripening.....	—	—	—	—	—
Height of plants in inches.....	26.0	22.0	22.0	25.0	25.0
Bushel weight in pounds.....	52.0	52.5	53.0	51.5	51.5
Commercial grades in percentage: 2 C.W.....	—	50.0	100.0	—	—
3 C.W.....	100.0	50.0	—	100.0	100.0

No significant grain yield difference between varieties.

Table No. 56. Only two satisfactory tests were completed in this zone, and the data obtained cannot be considered adequate for complete coverage of the area. The yield differences should not be considered of major significance.

On the basis of the results of these two tests, however, **Royal** and **Marine** were practically equal in yield. Marine had a slight advantage over Royal in bushel weight and grading ability.

**Redwing** placed third in yield and excelled in bushel weight and grades.

**Redwood** was fourth in yield, and **Rocket** was fifth. These varieties were comparatively low in bushel weight.



Flowering stage at the flax test conducted by Anna Appelquist of Neptune.

TABLE No. 57

## Individual Summarized Results of All Tests—Flax

## WHEAT POOL DISTRICT 1

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield Bushels per Acre	Days Seeding to Ripening	Plant Height in Inches	Pounds per Measured Bushel	Commercial Grades	Grading Remarks
<b>HARVEY MARCHAND, STORTHOAKS</b>										
3A.....	1	2	B	Royal.....	10.1	—	—	53	1 C.W.	—
				Marine.....	16.1	—	—	53	1 C.W.	—
				Redwing.....	10.4	—	—	54	1 C.W.	—
				Redwood.....	9.7	—	—	53	1 C.W.	—
				Rocket.....	11.5	—	—	52	1 C.W.	—

Necessary difference—2.5 bushels.

<b>H. LINDSAY HAUG, BROWNING</b>										
3A.....	1	4	B	Royal.....	20.3	—	12	54	1 C.W.	—
				Marine.....	16.3	—	11	54	1 C.W.	—
				Redwing.....	15.4	—	12	55	1 C.W.	—
				Redwood.....	20.1	—	12	54	1 C.W.	—
				Rocket.....	20.2	—	12	54	1 C.W.	—

No significant grain yield difference between varieties.

<b>FRANK WEINRAUCH, TORQUAY</b>										
2A.....	1	6	C	Royal.....	12.5	—	—	54	1 C.W.	—
				Marine.....	9.6	—	—	53	1 C.W.	—
				Redwing.....	10.4	—	—	54	1 C.W.	—
				Redwood.....	8.8	—	—	53	1 C.W.	—
				Rocket.....	9.0	—	—	53	1 C.W.	—

No significant grain yield difference between varieties.

<b>REGINALD R. CHESSALL, HUME</b>										
2A.....	1	8	C	Royal.....	16.2	—	—	54	1 C.W.	—
				Marine.....	14.3	—	—	54	1 C.W.	—
				Redwing.....	12.4	—	—	55	1 C.W.	—
				Redwood.....	15.7	—	—	54	1 C.W.	—
				Rocket.....	15.5	—	—	53	1 C.W.	—

Necessary difference—2.1 bushels.

<b>MURRAY D. CLARK, CARLYLE</b>										
3A.....	1	10	B	Royal.....	17.9	—	21	54	1 C.W.	—
				Marine.....	16.5	—	18	54	1 C.W.	—
				Redwing.....	14.4	—	18	55	1 C.W.	—
				Redwood.....	17.9	—	18	53	1 C.W.	—
				Rocket.....	16.3	—	21	54	1 C.W.	—

No significant grain yield difference between varieties.

## Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes.

2A.....1 9 C Marie Guillemain, Forget.

## WHEAT POOL DISTRICT 2

<b>ANNA E. APPELQUIST, NEPTUNE</b>										
2A.....	2	1	B	Royal.....	36.7	103	26	54	1 C.W.	—
				Marine.....	30.2	92	21	55	1 C.W.	—
				Redwing.....	28.8	90	22	55	1 C.W.	—
				Redwood.....	34.6	100	24	55	1 C.W.	—
				Rocket.....	33.5	103	25	54	1 C.W.	—

Necessary difference—2.7 bushels.

<b>W. WAYNE CLEWS, PANGMAN</b>										
2A.....	2	10	B	Royal.....	24.9	—	22	54	1 C.W.	—
				Marine.....	17.3	—	18	52	1 C.W.	—
				Redwing.....	12.2	—	19	52	1 C.W.	—
				Redwood.....	15.0	—	21	54	1 C.W.	—
				Rocket.....	19.4	—	21	53	1 C.W.	—

Necessary difference—4.1 bushels.

## WHEAT POOL DISTRICT 6

<b>F. MELBOURNE PERRY, LEWVAN</b>										
2E.....	6	1	B	Royal.....	25.7	—	—	53	1 C.W.	—
				Marine.....	22.9	—	—	55	1 C.W.	—
				Redwing.....	23.7	—	—	56	1 C.W.	—
				Redwood.....	26.7	—	—	54	1 C.W.	—
				Rocket.....	23.7	—	—	53	1 C.W.	—

No significant grain yield difference between varieties.

# Wheat Pool District 6—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield Bushels per Acre	Days Seeding to Ripening	Plant Height in Inches	Pounds per Measured Bushel	Commercial Grades	Grading Remarks
<b>ALVIN WESLOWSKI, DAVIN</b>										
2A.....	6	2	B	Royal.....	20.7	—	13	54	1 C.W.	—
				Marine.....	17.2	—	15	53	1 C.W.	—
				Redwing.....	16.5	—	13	55	1 C.W.	—
				Redwood.....	19.5	—	13	54	1 C.W.	—
				Rocket.....	19.0	—	16	53	1 C.W.	—
No significant grain yield difference between varieties.										
<b>JOHN N. PETRUIC, AVONLEA</b>										
2E.....	6	4	B	Royal.....	17.7	—	—	53	1 C.W.	—
				Marine.....	17.1	—	—	53	1 C.W.	—
				Redwing.....	15.7	—	—	54	1 C.W.	—
				Redwood.....	16.8	—	—	54	1 C.W.	—
				Rocket.....	17.6	—	—	52	1 C.W.	—
No significant grain yield difference between varieties.										
<b>KENNETH J. TURPIN, SINTALUTA</b>										
3C.....	6	8	B	Royal.....	28.4	—	—	54	1 C.W.	—
				Marine.....	27.7	—	—	54	1 C.W.	—
				Redwing.....	26.8	—	—	55	1 C.W.	—
				Redwood.....	26.9	—	—	55	1 C.W.	—
				Rocket.....	28.4	—	—	54	1 C.W.	—
No significant grain yield difference between varieties.										
<b>DONALD G. SINCLAIR, FORT QU'APPELLE</b>										
3C.....	6	9	C	Royal.....	16.7	128	25	53	1 C.W.	—
				Marine.....	14.2	114	24	55	1 C.W.	—
				Redwing.....	13.1	100	24	56	1 C.W.	—
				Redwood.....	18.0	114	26	53	2 C.W.	F.
				Rocket.....	14.0	128	25	52	2 C.W.	F.
No significant grain yield difference between varieties.										

# WHEAT POOL DISTRICT 7

<b>MERVIN PERCY, FAIRLIGHT</b>										
3A.....	7	1	B	Royal.....	13.4	—	—	53	1 C.W.	—
				Marine.....	12.7	—	—	54	1 C.W.	—
				Redwing.....	13.4	—	—	55	1 C.W.	—
				Redwood.....	13.8	—	—	54	1 C.W.	—
				Rocket.....	12.1	—	—	53	1 C.W.	—
No significant grain yield difference between varieties.										
<b>L. JACK LEMOINE, MOOSOMIN</b>										
3B.....	7	2	B	Royal.....	12.5	—	—	54	1 C.W.	—
				Marine.....	14.1	—	—	54	1 C.W.	—
				Redwing.....	9.5	—	—	55	1 C.W.	—
				Redwood.....	13.4	—	—	55	1 C.W.	—
				Rocket.....	15.0	—	—	53	1 C.W.	—
Necessary difference—2.6 bushels.										
<b>DAVID F. GRIFFITH, VANDURA</b>										
3A.....	7	3	C	Royal.....	18.4	—	—	53	1 C.W.	—
				Marine.....	16.8	—	—	53	1 C.W.	—
				Redwing.....	18.7	—	—	55	1 C.W.	—
				Redwood.....	18.4	—	—	54	1 C.W.	—
				Rocket.....	20.3	—	—	53	1 C.W.	—
No significant grain yield difference between varieties.										
<b>ANNETTE BEAUDIN, MONTMARTRE</b>										
3A.....	7	6	C	Royal.....	19.8	95	20	54	1 C.W.	—
				Marine.....	21.5	97	18	54	1 C.W.	—
				Redwing.....	19.0	96	18	55	1 C.W.	—
				Redwood.....	23.3	95	21	54	1 C.W.	—
				Rocket.....	19.1	94	18	53	1 C.W.	—
No significant grain yield difference between varieties.										
<b>R. JAMES HOOD JR., WOLSELEY</b>										
3A.....	7	7	B	Royal.....	35.2	126	26	54	1 C.W.	—
				Marine.....	31.0	126	24	54	1 C.W.	—
				Redwing.....	23.6	126	22	56	1 C.W.	—
				Redwood.....	33.8	128	25	54	1 C.W.	—
				Rocket.....	34.6	128	28	54	1 C.W.	—
Necessary difference—3.5 bushels.										
<b>FRED W. BASELEY JR., SPY HILL</b>										
3B.....	7	9	C	Royal.....	19.3	105	28	55	1 C.W.	—
				Marine.....	20.6	104	26	54	1 C.W.	—
				Redwing.....	14.6	105	26	57	1 C.W.	—
				Redwood.....	18.9	107	27	53	2 C.W.	F.
				Rocket.....	19.2	109	24	54	1 C.W.	—
Necessary difference—3.0 bushels.										

### Wheat Pool District 7—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield Bushels per Acre	Days Seeding to Ripening	Plant Height in Inches	Pounds per Measured Bushel	Commercial Grades	Grading Remarks
<b>HERBERT H. SMITH, LEMBERG</b>										
3C.....	7	11	B	Royal.....	13.0	—	18	54	1 C.W.	—
				Marine.....	14.3	—	16	54	1 C.W.	—
				Redwing.....	7.2	—	18	55	1 C.W.	—
				Redwood.....	12.7	—	24	54	1 C.W.	—
				Rocket.....	8.8	—	17	53	1 C.W.	—

Necessary difference—4.0 bushels.

### WHEAT POOL DISTRICT 8

<b>ANDY ZRUDLO, WROXTON</b>										
3B.....	8	1	C	Royal.....	26.7	—	—	53	2 C.W.	F.
				Marine.....	21.0	—	—	54	1 C.W.	—
				Redwing.....	18.8	—	—	56	1 C.W.	—
				Redwood.....	28.1	—	—	54	2 C.W.	F.
				Rocket.....	23.7	—	—	53	2 C.W.	F.

Necessary difference—2.8 bushels.

<b>ELIZABETH KELLY, SALTCOATS</b>										
3B.....	8	2	C	Royal.....	24.6	—	—	54	2 C.W.	F.
				Marine.....	22.8	—	—	54	1 C.W.	—
				Redwing.....	20.3	—	—	55	1 C.W.	—
				Redwood.....	24.0	—	—	54	2 C.W.	F.
				Rocket.....	23.7	—	—	53	2 C.W.	F.

No significant grain yield difference between varieties.

<b>GERALD J. SMERCHYNSKI, YORKTON</b>										
3C.....	8	4	D	Royal.....	3.3	—	—	53	1 C.W.	—
				Marine.....	6.0	—	—	53	1 C.W.	—
				Redwing.....	6.5	—	—	54	1 C.W.	—
				Redwood.....	4.6	—	—	53	1 C.W.	—
				Rocket.....	3.5	—	—	52	1 C.W.	—

Test damaged—samples incomplete—yields not used in zone summaries.

<b>D. GRAHAM DIXON, KAMSACK</b>										
3B.....	8	5	C	Royal.....	6.8	98	—	52	3 C.W.	F.
				Marine.....	2.0	86	—	52	2 C.W.	F.
				Redwing.....	2.0	85	—	52	2 C.W.	F.
				Redwood.....	8.5	85	—	52	3 C.W.	F.
				Rocket.....	9.4	99	—	52	3 C.W.	F.

Test damaged by birds—yields not used in zone summaries.

<b>FLORIAN B. NOVAKOWSKI, RAMA</b>										
3B.....	8	7	B	Royal.....	9.8	123	19	53	2 C.W.	F.
				Marine.....	6.9	117	19	53	1 C.W.	—
				Redwing.....	7.2	119	18	54	1 C.W.	—
				Redwood.....	8.2	123	20	52	3 C.W.	F.
				Rocket.....	7.6	122	20	53	2 C.W.	F.

No significant grain yield difference between varieties.

<b>ANNETTE YAREMCHUK, HINCHLIFFE</b>										
4A.....	8	8	C	Royal.....	34.1	—	—	52	3 C.W.	F.
				Marine.....	35.8	—	—	52	3 C.W.	F.
				Redwing.....	33.5	—	—	53	2 C.W.	F.
				Redwood.....	32.9	—	—	52	3 C.W.	F.
				Rocket.....	30.1	—	—	52	3 C.W.	F.

No significant grain yield difference between varieties.

#### Tests Discarded on Account of Damage by Drought, Pests, Hail or Other Causes

3C.....	8	4	C	Warren & Graham Hall, Orcadia.						
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### WHEAT POOL DISTRICT 9

<b>GERALD TKATCH, JASMIN</b>										
3C.....	9	1	B	Royal.....	12.7	102	23	52	2 C.W.	F.
				Marine.....	15.1	102	22	54	1 C.W.	—
				Redwing.....	14.0	99	24	53	1 C.W.	—
				Redwood.....	16.8	105	24	53	2 C.W.	F.
				Rocket.....	13.5	101	23	51	1 C.W.	—

No significant grain yield difference between varieties.

<b>GASPER ORBAN, PUNNICHY</b>										
3C.....	9	3	C	Royal.....	14.4	—	29	53	1 C.W.	—
				Marine.....	7.4	—	26	53	1 C.W.	—
				Redwing.....	9.3	—	27	54	1 C.W.	—
				Redwood.....	11.4	—	28	53	2 C.W.	F.
				Rocket.....	11.9	—	28	53	2 C.W.	F.

Test damaged by birds—yields not used in zone summaries.



### Wheat Pool District 9—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield Bushels per Acre	Days Seeding to Ripening	Plant Height in Inches	Pounds per Measured Bushel	Commercial Grades	Grading Remarks
<b>ALBERT D. GORRILL, BULYEA</b>										
3C.....	9	4	B	Royal.....	10.8	100	23	54	1 C.W.	—
				Marine.....	10.2	91	21	54	1 C.W.	—
				Redwing.....	9.4	93	23	55	1 C.W.	—
				Redwood.....	12.9	101	23	54	1 C.W.	—
				Rocket.....	10.0	99	22	54	1 C.W.	—

Necessary difference—1.3 bushels.

<b>TOM COOPER, WEST BEND</b>										
3C.....	9	9	B	Royal.....	9.1	—	20	52	3 C.W.	F.
				Marine.....	7.7	—	18	53	1 C.W.	—
				Redwing.....	8.5	—	17	53	1 C.W.	—
				Redwood.....	8.4	—	18	52	3 C.W.	F.
				Rocket.....	7.4	—	18	52	2 C.W.	F.

No significant grain yield difference between varieties.

### WHEAT POOL DISTRICT 13

<b>MERVYN J. PAPROSKI, LANIGAN</b>										
3C.....	13	1	C	Royal.....	10.1	108	—	54	1 C.W.	—
				Marine.....	9.8	113	—	55	1 C.W.	—
				Redwing.....	8.3	112	—	55	1 C.W.	—
				Redwood.....	12.0	111	—	54	1 C.W.	—
				Rocket.....	9.5	115	—	54	1 C.W.	—

No significant grain yield difference between varieties.

<b>ALLEN P. DOEPKER, ANNAHEIM</b>										
3B.....	13	11	B	Royal.....	24.3	—	—	54	1 C.W.	—
				Marine.....	21.7	—	—	54	1 C.W.	—
				Redwing.....	14.9	—	—	55	1 C.W.	—
				Redwood.....	24.3	—	—	54	1 C.W.	—
				Rocket.....	21.2	—	—	53	1 C.W.	—

Necessary difference—2.4 bushels.

### WHEAT POOL DISTRICT 14

<b>DALE E. ANDERSON, KUROKI</b>										
3C.....	14	1	C	Royal.....	26.4	113	20	53	1 C.W.	—
				Marine.....	25.9	111	21	54	1 C.W.	—
				Redwing.....	24.8	113	20	55	1 C.W.	—
				Redwood.....	25.8	111	21	54	1 C.W.	—
				Rocket.....	20.4	110	18	54	1 C.W.	—

No significant grain yield difference between varieties.

<b>FAYE C. DAHL, DAHLTON</b>										
3B.....	14	4	D	Royal.....	32.3	—	—	53	1 C.W.	—
				Marine.....	32.0	—	—	54	1 C.W.	—
				Redwing.....	28.8	—	—	56	1 C.W.	—
				Redwood.....	43.6	—	—	55	1 C.W.	—
				Rocket.....	40.4	—	—	54	1 C.W.	—

Necessary difference—5.3 bushels.

<b>DAVID A. NILSEN, KINLOCH</b>										
4A.....	14	5	C	Royal.....	11.7	—	26	52	3 C.W.	F.
				Marine.....	9.5	—	22	53	2 C.W.	F.
				Redwing.....	10.0	—	22	53	2 C.W.	F.
				Redwood.....	8.1	—	25	51	3 C.W.	F.
				Rocket.....	8.7	—	25	51	3 C.W.	F.

Necessary difference—1.4 bushels.

### WHEAT POOL DISTRICT 15

<b>JOHNNY A. ZACHARIAS, ROSTHERN</b>										
3B.....	15	4	B	Royal.....	23.7	—	—	54	1 C.W.	—
				Marine.....	26.8	—	—	55	1 C.W.	—
				Redwing.....	21.7	—	—	54	1 C.W.	—
				Redwood.....	25.4	—	—	56	1 C.W.	—
				Rocket.....	24.9	—	—	54	1 C.W.	—

Necessary difference—2.2 bushels.

<b>KENNETH A. WILLOUGHBY, CAMEO</b>										
3B.....	15	6	B	Royal.....	13.6	—	—	53	2 C.W.	F.
				Marine.....	17.3	—	—	54	1 C.W.	—
				Redwing.....	13.1	—	—	54	1 C.W.	—
				Redwood.....	16.6	—	—	54	2 C.W.	F.
				Rocket.....	20.6	—	—	53	2 C.W.	F.

Necessary difference—4.1 bushels.

# Wheat Pool District 15—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield Bushels per Acre	Days Seeding to Ripening	Plant Height in Inches	Pounds per Measured Bushel	Commercial Grades	Grading Remarks
<b>ALEX DENYSUIK, HENRIBOURG</b>										
4B.....	15	9	C	Royal.....	21.2	—	—	53	1 C.W.	—
				Marine.....	18.1	—	—	53	1 C.W.	—
				Redwing.....	22.8	—	—	55	1 C.W.	—
				Redwood.....	19.9	—	—	54	1 C.W.	—
				Rocket.....	21.3	—	—	52	1 C.W.	—
No significant grain yield difference between varieties.										
<b>HARRY N. ROMANCHUK, JANOW CORNERS</b>										
3B.....	15	10	B	Royal.....	6.0	110	27	54	2 C.W.	F.
				Marine.....	7.6	107	28	55	1 C.W.	—
				Redwing.....	9.1	106	29	56	1 C.W.	—
				Redwood.....	9.0	117	26	54	2 C.W.	F.
				Rocket.....	9.1	115	27	53	2 C.W.	F.
No significant grain yield difference between varieties.										
<b>BERNICE HOLLIDAY, SNOWDEN</b>										
3F.....	15	11	B	Royal.....	22.8	—	—	54	2 C.W.	F.
				Marine.....	20.4	—	—	54	1 C.W.	—
				Redwing.....	15.4	—	—	55	1 C.W.	—
				Redwood.....	22.2	—	—	54	3 C.W.	F.
				Rocket.....	23.8	—	—	53	3 C.W.	F.
No significant grain yield difference between varieties.										



Florance Legge of Saltcoats and her wheat variety test.

Eldon Madsen of Broderick and the barley variety test which he supervised.

## CONCLUSIONS

The 1952 variety testing project provided a considerable amount of valuable information regarding the suitability of several new varieties of grain for use under Saskatchewan conditions.

The excellent growing conditions that prevailed throughout the crop season resulted in a very high proportion of the tests being successfully completed.

These excellent conditions emphasize the need for conducting tests with a variety over a period of years before drawing conclusions regarding its usefulness. The variations in weather conditions from year to year influence different varieties in different ways. Thus a variety which gave good results under the ideal conditions which prevailed in 1952 may or may not stand up to the ravages of drought, insect pests, and other hazards which may be expected in an unfavorable growing season.

The results of the wheat tests in 1952, together with the information obtained in thousands of tests conducted previously, indicate that Thatcher is still the best general purpose variety for Saskatchewan. Chinook, the new high quality, sawfly-resistant variety, was not equal in yield to Thatcher in 1952, the first year it was included in Wheat Pool tests. However, because Chinook was introduced as a replacement for Rescue, its performance in comparison with that variety should be considered. In this connection tests other than those conducted by the Wheat Pool indicate that Chinook has been superior in yield to Rescue over a period of years in the southwest part of the province. Lee was tested for the third year, and while it has not been equal to Thatcher throughout most of the province, it has done well in Zone 3A where its leaf rust resistance is a definite advantage. The new durum variety, Nugget, should be tested further. It was inferior to Stewart in yield during 1952, but matures earlier.

The new feed barley variety, Nx1-11, originated at the University of Saskatchewan, has now been tested for two years and has given excellent results. The new unnamed malting variety, tested under the code designation B-130, gave relatively poor results but further tests should be conducted.

Two new rust-resistant flax varieties, Redwood and Marine, were tested in 1952. Redwood appears promising on the basis of one year of tests. Marine, although not as high in yield, may be useful where early maturity is required.

In conclusion, it may be stated that the 1952 variety testing program has been highly successful. A most important feature of these projects is the widespread distribution of tests, providing information from more than 300 locations in the province. This distribution is made possible by the enthusiastic co-operation of young farm men and women who give a great deal of time and effort to the supervision of the tests.

In addition to providing valuable scientific information concerning new grain varieties, these tests serve another useful purpose. They are a reminder to producers in the districts where they are conducted of the constant varietal improvement which is taking place, and of the need for careful selection of recommended varieties for use in the farm production program.

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- The Department of Plant Science, University of Alberta, Edmonton, Alberta.
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